

LIBRARY



County Borough of Southend-on-Sea.

ANNUAL REPORT

ON THE WORK OF THE

PUBLIC HEALTH DEPARTMENT

For the Year 1938

BY

CHARLES GRANT PUGH,

M.D. (Lond.), B.Sc. (Lond.), D.P.H. (Camb.), M.R.C.S. (Eng.),

L.R.C.P. (Lond.).

Medical Officer of Health & School Medical Officer,

Medical Officer of Mental Deficiency Committee, Etc.



County Borough of Southend-on-Sea.

ANNUAL REPORT

ON THE WORK OF THE

PUBLIC HEALTH DEPARTMENT

For the Year 1938

BY

CHARLES GRANT PUGH,

M.D. (Lond.), B.Sc. (Lond.), D.P.H. (Camb.), M.R.C.S. (Eng.),

L.R.C.P. (Lond.).

Medical Officer of Health & School Medical Officer,

Medical Officer of Mental Deficiency Committee, Etc.

COUNTY BOROUGH OF SOUTHEND-ON-SEA.

HEALTH COMMITTEE.

November, 1938, to November, 1939.

Mrs. Councillor M. BROOM (Chairman).

THE MAYOR (Mr. Alderman H. A. Dowsett, J.P.).

Mr. Alderman S. F. JOHNSON, J.P.

Mr. Alderman J. J. SULLIVAN.

Mr. Coun. W. BRAY.

Mrs. Coun. M. E. HARVEY.

Mr. Coun. F. CAUSE.

Mr. Coun. F. J. LOCKYER, O.B.E.

Mr. Coun. S. J. COXELL.

Mr. Coun. C. J. TUNNICLIFFE.

Mr. Coun. J. T. FOWLER, J.P. H. W. COOPER, Esq., J.P.

Miss M. M. HAMILTON.

Dr. L. GORDON HOPKINS, J.P.

SANITARY COMMITTEE.

November, 1938, to November, 1939.

Mr. Alderman A. A. BUTTERFIELD, J.P. (Chairman).

THE MAYOR (Mr. Alderman H. A. Dowsett, J.P.).

Mr. Alderman W. J. PERRETT.

Mr. Coun H. J. ANDERSON.

Mr. Coun. S. H. J. BATES.

Mr. Coun. W. BRAY.

Mr. Coun. H. W. GOSLING.

Mr. Coun. J. R. CLARKE.

Mrs. Coun. M. E. HARVEY.

Mr. Coun. J. A. COSTIN.

Mr. Coun. E. J. TREVETT.

MATERNITY AND CHILD WELFARE COMMITTEE.

November, 1938, to November, 1939.

Mrs. Councillor M. BROOM (Chairman).

This Committee consists of the Council Members of the Health Committee, together with three co-opted members, *viz.*—

Mrs. F. BROCKBANK, Miss M. M. HAMILTON, and
Dr. L. GORDON HOPKINS, J.P.

COMMITTEE FOR THE CARE OF THE MENTALLY DEFECTIVE.

November, 1938, to November, 1939.

Mr. Councillor F. J. LOCKYER, O.B.E.

This Committee consists of the Council Members of the Health Committee, together with three co-opted members, *viz.*—

Miss A. DELF, B.A., Dr. L. GORDON HOPKINS, J.P.,
and H. W. COOPER, Esq., J.P.

COMMITTEE UNDER THE BLIND PERSONS ACT.

November, 1938, to November, 1939.

Mr. Councillor C. J. TUNNICLIFFE (Chairman).

This Committee consists of the Council Members of the Health Committee, together with three co-opted members, *viz.*—

Captain LE PAGE AGNEW, Mr. W. ENEVER, and Mr. G. ROSE.

PUBLIC HEALTH STAFF.

A. MEDICAL & DENTAL STAFF.

1. WHOLE-TIME.

(a) At the Municipal Health Centre—

- (i) Charles Grant Pugh, M.D. (Lond.), M.R.C.S. (Eng.), L.R.C.P. (Lond.), B.Sc. (Lond.), D.P.H. (Camb.), Medical Officer of Health, School Medical Officer, Medical Officer of Venereal Diseases Clinic, Medical Officer to Mental Deficiency Committee, Medical Officer to Blind Persons Act Committee.
- (ii) James Stevenson Logan, M.B., Ch.B. (Liverpool), D.P.H. (Liverpool), Deputy Medical Officer of Health, Deputy School Medical Officer, and Assistant Medical Officer of the Venereal Diseases Clinic.
- (iii) John Conway Preston, M.R.C.S. (Eng.), L.R.C.P. (Lond.), D.P.H. (Manchester), Assistant School Medical Officer and Assistant Medical Officer of Health.
- (iv) Jeannie Kean, M.B., Ch.B. (Edinburgh), D.P.H. (Edinburgh), Assistant Medical Officer of Health, Assistant School Medical Officer, Assistant Medical Officer of Venereal Diseases Clinic. Acts as Inspector of Midwives.
- (v) George Norman Meachen, M.D., B.S. (Lond.), M.R.C.P. (Lond. and Edin.), Clinical Tuberculosis Officer.

(b) At Municipal Hospital—

- (i) Samuel Cieman, M.R.C.S. (Eng.), L.R.C.P. (Lond.), Medical Superintendent of the Hospital and Medical Officer of the Poor Law Institution.
- (ii) Joel Nathan Strauss, M.B., Ch.B., M.R.C.S., L.R.C.P., M.R.C.P. (Lond.), Deputy Medical Superintendent.
- (iii) Clifford William Furneaux Burnett, M.B., B.S. (Lond.), M.R.C.S., L.R.C.P., Assistant Medical Officer.
- (iv) Brian Bryce Bridges, M.R.C.S., L.R.C.P., Assistant Medical Officer.
- (v) Albert William John Craft, M.R.C.S., L.R.C.P., Assistant Medical Officer.

(c) At the Borough Sanatorium.

Harold Leslie Whitchurch Beach, M.R.C.S. (Eng.), L.R.C.P. (Lond.), M.B., B.S. (Lond.), D.P.H. (Lond.), Medical Superintendent of the Council's Infectious Diseases Hospitals, and Assistant Medical Officer of the Venereal Diseases Clinic.

(d) *Dental Staff.*

- (i) Basil Crisp, L.D.S. (Eng.), Dentist, his work being mainly in connection with the School Medical Service, but also undertaking, when required to do so, the dental treatment of patients in connection with the Tuberculosis and the Maternity and Child Welfare Schemes of the Council.
- (ii) Edgar Crees Austen, L.D.S. (Eng.), Assistant Dentist.

2 PART-TIME.

(a) *At the Municipal Hospital—*

- (i) Consulting Physician—R. Sleigh Johnson, M.D. (Lond.), M.B., B.S., M.R.C.P. (Lond.), M.R.C.S. (Eng.), D.P.H., (Lond.).
- (ii) Consulting Surgeons—
Donald Barlow, M.S., F.R.C.S. (Eng.).
Robt. H. Campbell, F.R.C.S. (Eng.).
Rodney Maingot, F.R.C.S. (Eng.).
- (iii) Consulting Gynæcologists and Obstetricians—
Aleck Bourne, F.R.C.S. (Eng.), F.C.O.G.
J. Lyle Cameron, F.R.C.S. (Eng.).
- (iv) Consulting Orthopædic and Fracture Surgeon—
B. Whitchurch Howell, F.R.C.S. (Eng.).
- (v) Consulting Radiologist—
G. White Phillips, M.D., D.M.R.E. (Liverpool).
- (vi) Consulting Ophthalmic Surgeon—
D. D. Evans, M.C., M.A., M.B., B.Ch., D.O.M.S., M.R.C.S. (Eng.).
- (vii) Consulting Ear, Nose and Throat Surgeon—
C. Hamblen Thomas, F.R.C.S. (Eng.).
- (viii) Consulting Neurologist—
T. Rowland Hill, M.D., M.R.C.P. (Lond.).
- (ix) Consulting Pædiatrician—
J. N. O'Reilly, M.A., D.M., M.R.C.P. (Lond.).
- (x) Consulting Psychiatrist—
Rolf Ström-Olsen, M.D., B.Sc., B.Ch., D.P.M.
- (xi) Consulting Dermatologist—
Arthur Burrows, M.D., M.R.C.P., D.M.R.E.
- (xii) Consulting Anæsthetists—
J. H. T. Challis, M.R.C.S. (Eng.), L.R.C.P. (Lond.).
Vernon Hall, M.R.C.S. (Eng.), M.R.C.P. (Lond.).
- (xiii) The Tuberculosis Officer acts as Consulting Physician for Tuberculosis.

(b) *At Infant Centres and Ante-Natal Clinics.*

- (i) Ralph Norman, M.D. (Lond.), Medical Officer of Southend Infant Centre and of Southend, Leigh and Shoeburyness Ante-natal Clinics.
- (ii) Charlotte Shields, M.B. (Lond.), Medical Officer of Southchurch Infant Centre.
- (iii) Dora May Butler, M.R.C.S. (Eng.), L.R.C.P. (Lond.) M.B., B.S. (Lond.), Medical Officer of Leigh Infant Centre.
- (iv) Bernard Blaxill, M.R.C.S. (Eng.), L.R.C.P. (Lond.), M.B., B.Ch., (Cantab.), Medical Officer of Shoeburyness Infant Centre.

(c) *At School Clinics.*

- (i) Daniel Davies Evans, M.B., B.Ch., D.O.M.S., Specialist Ophthalmic Surgeon.

(d) *As Public Vaccinators.*

- (i) Southend (East) District.—Edmund Eyre Lloyd, M.R.C.S. (Eng.), L.R.C.P. (Lond.).
- (ii) Southend (West) District.—Thomas Jones Clayton, M.R.C.S. (Eng.), L.R.C.P. (Lond.).
- (iii) Leigh District.—William Douglas Watson, M.R.C.S. (Eng.), L.R.C.P. (Lond.), D.P.H.
- (iv) Eastwood District.—John Francis Murray, M.B., B.Ch. (Dublin).
- (v) Shoeburyness District.—Charles Ryan, M.B., B.Ch. (Belfast).

(e) *Specialist Surgeon for Operative Treatment of Adenoids and Tonsils under the School Medical Scheme.*

- (i) C. Hamblen Thomas, F.R.C.S. (Eng.).

B. NURSING STAFF.

1. WHOLE-TIME.

(a) *At the Municipal Health Centre.*

- (i) Health Visitors who devote 45 per cent. of their time to the School Medical Service, 40 per cent. to Maternity and Child Welfare, 10 per cent. to Tuberculosis, and 5 per cent. to Mental Deficiency Work.

Miss G. Hedger.
 Miss N. Hitchcock, (a), (b).
 Miss K. M. Burnett, (a), (b).
 Miss V. M. Crump, (b), (c).
 Miss M. Butcher, (a), (b), (c).
 Miss E. C. Brooks, (a), (b), (c).
 Miss M. H. Harris, (a), (b), (c).
 Miss V. H. Ferguson, (a), (b), (c).
 Miss E. L. Davies, (a), (b), (c).
 Miss A. B. M. Docker, (a), (b), (c).
 Miss B. L. Kear, (a), (b), (c).
 Miss M. Steward, (a), (b), (c).

(a)—State Registered Nurse. (b)—State Certified Midwife.

(c)—Certificated Health Visitor.

(ii) *School Clinic Nurse*.—Miss D. L. Willis, State Registered Nurse.

(iii) *Dental Nurse*.—Miss G. A. McNicol.

(b) Municipal Midwives.

Mrs. A. L. Blackwell, (b).

Miss E. A. Burnett, (b).

Mrs. F. D. Etherington, (b).

Miss M. M. Harker, (b).

Mrs. C. E. Higgs, (b).

Miss A. M. Kerswell, (b).

Miss M. I. Pearse, (b).

Miss E. E. Powell, (b).

Miss W. M. Randall, (a), (b).

(a)—State Registered Nurse. (b)—State Certified Midwife.

(c) *At the Borough Sanatorium.*

Matron.—Miss F. Midgley.

1 Assistant Matron and Tutor.

1 Night Sister.

3 Ward Sisters.

11 Staff Nurses.

3 Tuberculosis Staff Nurses.

10 Probationers

(d) *At the Municipal Hospital.*

Matron.—Miss A. Street.

4 Administrative Sisters.

2 Night Sisters.

1 Sister Tutor.

1 Departmental Sister (Theatre).

1 Night Superintendent.

2 Theatre Staff Nurses.

13 Ward Sisters.

3 Massage Sisters.

9 Staff Nurses.

14 Female Mental Attendants.

7 Male Nurses.

3 Male Mental Attendants.

4 Staff Midwives.

1 Theatre Orderly.

86 Probationers.

2. PART-TIME.

(a) *At Tuberculosis Dispensary.*

Tuberculosis Dispensary Nurse—Mrs. Rowden, State Registered Nurse.

C. OTHER WHOLE-TIME OFFICERS.

(a) *At the Municipal Health Centre.*

(i) Sanitary Inspectors and Inspectors under Shops Acts.

Chief Inspector, L. E. Edwards.

Assistant Inspectors :—

J. H. Lott.

J. W. Clarke.

R. Drake.

D. J. Legg.

A. C. Arnold.

F. A. Brown.

E. A. Smith.

One vacancy

All these officers hold Certificates of the Royal Sanitary Institute as Sanitary Inspectors and as Meat Inspectors. The Chief Sanitary Inspector also acts as Inspector under Diseases of Animals Acts, Food and Drugs Acts, Shops Acts, Fertilisers & Feeding Stuffs Act, and Rag Flock Act.

(ii) Home Visitor for the Blind.

Miss N. Westby, Certificated Home Teacher.

(iii) Enquiry Officer.

Mr. J. W. Lyon.

D. OTHER PART-TIME OFFICERS.

(a) Joint Public Analysts.

Leo Taylor, F.I.C.

Douglas Thurlow Lucke, B.Sc. (Lond.), F.I.C.

(b) Veterinary Inspector.

H. D. Sparrow, M.R.C.V.S.

(c) Superintendent of Remedial Treatment Centre.

Eileen Agnes Sampson.

(d) Speech Therapist.

Ethel Edna Brewitt.

E. CLERICAL STAFF.

Chief Clerk—Ernest A. Beasant.

7 Male Clerks and 4 female Clerks at the Municipal Health Centre.

4 Male Clerks and 2 Temporary Male Telephone Clerks at the Municipal Hospital.

STATISTICAL SUMMARY, 1938.

Area	...	...	...	...	...	...	...	10,333 Acres
Number of inhabited houses—September, 1938	...							41,835
Number of unoccupied houses—September, 1938								2,341
Number of houses in course of erection— September, 1938	...	...	...	...	...			461
Rateable Value, 1938	...	...	...	...	...			£1,549,437
Sum represented by a penny rate	...	...	...					£6,030
General Rate, 1938-39		...	...	...	...			11 / 4d
Loan Debt— Electric Lighting, Light Railways and Pier Undertakings		...	...	...	...			£1,222,497
Gas and Water Undertakings and Private Street Works	...	...	...	...	...			143,434
Higher Education and Elementary Education								482,983
Public Health and General Administration Purposes	...	...	...	...	...			2,169,529
Housing	...	...	...	...	...	...		412,557
Public Assistance		..	...	...	...			47,457
Total				...	...			£4,478,457
Total Rainfall, 1938	...	...	...	...	...			15.40 inches
Total Sunshine, 1938	...	...	...	...	...			1566.2 hours

SECTION A.II.
VITAL STATISTICS.

POPULATION—

Census 1931 (prior to the Extension of the Borough on 1st October, 1933)	120,093
At mid-year, 1938, as estimated locally	138,000
At mid-year, 1938, as estimated by Registrar General	138,100

LIVE BIRTHS—

	Male	Female	Total
Number of legitimate births ...	737	674	1411
Number of illegitimate births ...	42	45	87
Total Births	<u>779</u>	<u>719</u>	<u>1498</u>
Birth Rate per 1,000 Residents	...	...	10.84
Illegitimate Birth Rate per 1,000 Residents	...	...	.63

STILL BIRTHS—

	Male	Female	Total
Number of legitimate still births ...	28	27	55
Number of illegitimate still births ...	1	4	5

DEATHS—

	Male	Female	Total
Number of deaths	837	887	1724
Death Rate per 1,000	...	...	12.48
Percentage of total deaths occurring in Public Institutions	...	...	46

Deaths from pregnancy and parturition—

Women dying in, or in consequence of, child birth—

	No.	Rate per 1,000 Births (Live and Still)
From Sepsis	—	—
From other causes ...	4	2.56
Total ...	<u>4</u>	<u>2.56</u>

INFANT MORTALITY RATE—

All infants per 1,000 live births	34
Legitimate infants per 1,000 legitimate live births ...	34
Illegitimate infants per 1,000 illegitimate live births ...	34

ZYMOTIC DEATHS—

No. of deaths from—

Measles	4
Whooping Cough	—
Diarrhoea and Enteritis (under 2 years of age) ...	8
Scarlet Fever	1
Diphtheria	4
Smallpox	—
Typhoid Fever	3

Total Zymotic Deaths ... 20

Zymotic Death Rate per 1,000 population 014

The following table, based on that issued by the Registrar General, is given for comparison:—

	Annual Rate per 1,000 living		Deaths under one year to 1,000 births
	Live Births	Deaths from all causes	
England and Wales	15.1	11.6	53
126 County Boroughs and great towns ...	15.0	11.7	57
148 Smaller Towns	15.4	11.0	51
London	13.4	11.4	57
Southend-on-Sea	10.84	12.48	34

*This figure, to render it comparable with the death rate for the country as a whole, has to be multiplied by the “Comparability Factor,” .91, which has been supplied by the Registrar General as requisite to redress the abnormal constitution of the local population from the point of view of sex and age components. Applying this factor, the corrected death rate is 11.35 as compared with 11.6 for the country as a whole.

The Maternal Mortality Rate per 1,000 live births was as follows:—

	England and Wales	Southend- on-Sea
Puerperal Sepsis	0.89	—
Other Causes	2.19	2.67
Total ...	3.08	2.67

Maternal Mortality Rate per 1,000 total births (live and still):—

Puerperal Sepsis	0.86	—
Other Causes	2.11	2.56
Total ...	2.97	2.56

SECTION B.—1.

I. PUBLIC HEALTH STAFF.

The only changes in the technical staff during the year have been the resignations of one of the Health Visitors, Miss M. B. Thomas resigning on June 4th on obtaining a similar appointment at Dagenham, and of Mr. H. F. Dawe, one of the Assistant Sanitary Inspectors who left the service on November 30th on appointment as Sanitary Inspector at Eastleigh. Miss Thomas was succeeded by Miss M. Steward who commenced duty as a Health Visitor on June 28th. The vacancy in the staff of Assistant Sanitary Inspectors had not been filled at the end of the year. Miss K. D. Elliott, one of the clerks, resigned on April 10th and was succeeded by Miss G. L. Brooker.

II. LABORATORY FACILITIES.

These remain as detailed in last year's report. At the Laboratory at the Borough Sanatorium, there were examined during the year 1,005 and 150 swabs for presence of Diphtheria Bacillus and Hæmolytic Streptococcus respectively, 646 and 49 respectively being sent by private medical practitioners; there were also examined 1,014 specimens of sputum, 2 of Cerebro-spinal Fluid, and 3 of urine for presence of tubercle bacilli, 59 specimens of blood as to the Widal Reaction, 670 specimens from the Venereal Diseases Treatment Centre, and one specimen of hair for the presence of the ringworm fungus. In addition, samples of water from the Waterwork's Company's supply and from the Shoeburyness supply were examined bacteriologically on alternate days and chemically once weekly. The extensions to the Laboratory which were commenced in the autumn are nearly completed and will enable the work to be carried out with greater efficiency.

At the Pathological Department of the Southend General Hospital there were examined, at a cost of £729 5s. 2d., 886 pathological specimens sent from the Southend Municipal Hospital and 13 specimens, at a cost of £15 10s. 10d., sent from the Borough Sanatorium. There were also examined 69 samples of graded and other milks for the Sanitary Committee at a cost of £14 4s. 6d.

At the Counties Public Health Laboratory, Queen Victoria Street, E.C., there were examined, at a cost of £36 19s. 0d., samples of water, of which 13 were from the Shoeburyness Waterworks and 6 from miscellaneous shallow wells supplying houses on the outskirts of the Borough.

At the Dreadnought Hospital, 1,388 specimens under the Venereal Diseases Scheme were examined by Professor Hewlett; of these 1,245 were Wassermann Tests, 19 Kahn Tests and 124 Gonococcus Complement Fixation Tests, 448 being sent from the Venereal Diseases Treatment Clinic, 215 from the Municipal Hospital, 674 from the Southend General Hospital, and 51 from private medical practitioners, the total cost being £347.

III. AMBULANCE FACILITIES.

These were detailed in last year's report and remain unaltered.

IV. NURSING IN THE HOME.

The Board of Management of the Southend General Hospital to which the Council, pursuant to section 178 of the Public Health Act, 1936, makes an annual grant of £125 as a contribution towards the cost of the provision of District Nurses, agreed, as a result of representations made by the Health Committee, to increase their staff of District Nurses from two to three to allow of facilities being available in the extreme western area of the Borough, including Eastwood. The new arrangement will come into operation early in 1939, whereupon the Council's grant will be proportionately increased to £187 10s. 0d. The Council's grant to the Shoebury Nursing Association, which employs two District Nurses whose services are available in the area of the former Shoeburyness Urban District to subscribers and to others on payment, was increased during the year from £10 to £15.

V. CLINICS AND TREATMENT CENTRES.

1. *Infant Clinics.*— These were held at 2.15 p.m. as under:—

Shoeburyness:

At the Council Offices, Shoeburyness, on the first and third Thursdays in each month.

Leigh-on-Sea:

At Council Offices, Elm Road, Leigh-on-Sea, on Mondays.

Southchurch and Southend:

At the Municipal Health Centre, the infants from Southchurch attending on Mondays and Thursdays, and those from Central Southend on Tuesdays and Fridays.

The premises at Shoeburyness and at Leigh-on-Sea are quite unsuitable for use as Infant Centres and in conjunction with the Education Committee the Maternity and Child Welfare Committee have, as stated in last year's report, under consideration the provision of new premises for use as a combined School Clinic, Infant Centre and Antenatal Clinic; it is proposed that three such Centres should be provided, viz:— in Eastwood, Leigh and Shoeburyness, but the proposals are temporarily in abeyance consequent on the pressure of work resulting from the development of the A.R.P. Scheme.

The particulars of attendances, etc., at the several Clinics during 1938 are as follows:—

	Southend	Southchurch	Leigh	Shoeburyness	Total
No. of sessions held	102	100	48	24	274
No. of individuals who attended:					
Infants	566	529	336	146	1,577
Children aged 1 to 5 ...	333	330	192	79	934
Totals	899	859	528	225	2,511
Total attendances of:—					
Infants	5,845	4,411	2,541	713	13,510
Children aged 1 to 5 ...	3,356	3,127	1,676	772	8,931
No. of children aged 1 to 5 subjected to routine medical inspections	518	661	169	48	1,396

2. *Ante-natal Clinics*.—The Southend Clinic was held each Wednesday afternoon from 2.15 p.m. at the Municipal Health Centre, Warrior Square. The Shoeburyness Ante-natal Clinic was held on the fourth Friday in each month at the Council Offices, Shoeburyness, whilst the Leigh Ante-natal Clinic was held on the first Friday in each month at the Leigh Council Offices, Elm Road, Leigh-on-Sea.

The particulars of attendances at the several Clinics are as follows:—

	Southend	Leigh	Shoebury- ness	Totals
No. of sessions held	52	12	12	78
No. of individual expectant mothers ...	616	126	33	775
No. of attendances of expectant mothers	1,790	270	74	2,134

3. *Venereal Diseases Treatment Centre*.—The work carried out at this Centre at the Borough Sanatorium during the year was as follows:—

	Syphilis		Soft Chancre		Gonorrhoea		Conditions other than Venereal		Totals	
	M'ls.	F'ls.	M'ls.	F'ls.	M'ls.	F'ls.	M'ls.	F'ls.	M'ls.	F'ls.
Number under treatment on January 1st	40	50	—	—	80	22	3	8	123	80
Number re-admitted after cessa- tion of attendance in previous year	5	3	—	—	9	1	—	—	14	4
Number dealt with for first time:—										
(a) who had not previously attended any Centre ...	21	13	—	—	110	17	79	51	210	81
(b) who had attended other Centres	6	6	1	—	16	2	1	1	24	9
Total under treatment during 1938	72	72	1	—	215	42	83	60	371	174
Discharged after completion of treatment and tests for cure	4	2	1	—	22	8	45	37	72	47
Ceased to attend before com- pletion of treatment	8	15	—	—	72	8	—	—	80	23
Ceased to attend after com- pletion of treatment but before final tests for cure	1	5	—	—	10	4	—	—	11	9
Transferred to other Centres ...	7	4	—	—	16	2	22	16	45	22
Number under treatment on December 31st, 1938	52	46	—	—	95	20	16	7	163	73

Of the patients dealt with for the first time, 4 (males) were suffering from Primary Syphilis, 1 (male) from Secondary Syphilis, 2 (males) were suffering from latent Syphilis in the first year of infection, 21 (13 males and 8 females) from late Syphilis, and 6 (1 male and 5 females) from congenital Syphilis, one of the latter being under one year of age, one between the ages of 1 and 5, two between the ages of 5 and 15, and two over 15 years of age.

Of the patients who ceased to attend before completion of treatment, 1 suffered from Primary Syphilis, 1 from latent Syphilis in the first year of infection, 17 from late Syphilis, and 3 from congenital Syphilis.

The number of attendances of patients were as follows:—

		Clinic Attendances		Intermediate Attendances	
		M.	F.	M.	F.
Syphilis	...	1,131	1,140	—	—
Soft Chancre	...	3	—	—	—
Gonorrhoea	...	2,461	609	3,826	—
Other patients	..	320	278	—	—
Totals	...	3,915	2,027	3,826	—

The number of injections of arseno-benzol compounds was 442 and of Bismo-stab 795. The number of specimens examined at the Borough Laboratory was 670, whilst 434 specimens were sent for examination by Professor Hewlett at the Dreadnought Hospital, 345 of these being for examination as to Wassermann reaction.

Of the new patients, 70 resided outside the Borough, attending from addresses in the County of Essex, viz:— 6 patients suffering from Syphilis, 33 from Gonorrhoea, and 31 from conditions which were found to be non-venereal. Of the 9,768 total attendances, 1,803 were made by Essex patients, and 64 by patients residing in other areas.

The following table shows how the work of the Treatment Centre compares with that in the previous years:

New Patients suffering	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
From Syphilis ...	32	47	37	31	63	38	31	22	40	34
„ Gonorrhoea ...	160	177	117	140	118	131	129	88	107	127
„ Soft Chancre ...	3	5	6	4	7	5	3	4	1	—
Total Attendances ...	6111	7867	7736	6725	7182	6606	6221	5991	8564	9768

The extensive alterations of and additions to the premises at the Borough Sanatorium used as the Treatment Clinic which were referred to in last year's report, are nearing completion, and when the new Treatment and Consultation Rooms are brought into use it will be possible to carry out the work of the Clinic with greater expedition and increased efficiency.

VI. HOSPITALS.

Southend General Hospital.—The close co-operation referred to in previous reports continues between the Health Committee and the Board of Management of the Southend General Hospital, but only one formal conference between representatives of the two bodies was held during the year. Every endeavour is made to prevent overlapping and the Council continues to avail itself of the facilities available at the Southend General Hospital for pathological examinations and for the treatment by deep X-rays of patients suffering from inoperable cancer. Close co-operation between the Council's Officers and the staff of the Southend General Hospital has been maintained in preparing the scheme for the hospital treatment of Aid Raid casualties.

The total number of in-patients admitted during 1938 to the Hospital, which has 239 beds, was 5,067, as compared with 4,671, 4,537, 3,871, and 3,654 during each of the preceding years; the average stay was 15.49 days as compared with 16.53, 19.51, and 20.41 days respectively. The number of live births in the hospital was 338 as compared with 303 and 264 in the two preceding years, whilst the number of operations performed was 3,511 as compared with 3,318, 3,297, 2,871, and 2,274 respectively. Attendances in the Out-patients' Department totalled 81,027 as compared with 68,413 in 1937. These figures indicate the steady increase in the work of the Hospital.

Southend Municipal Hospital.—The Medical Superintendent's report for 1938 is attached. The erection of the first instalment of the Extension Scheme was commenced in April, 1938, the foundation stone of the new Administrative Block being laid by H.R.H. The Duchess of Kent on October 12th, 1938. It is probable that the much-needed additional accommodation will be ready for use in the early summer of 1940.

Borough Sanatorium for Infectious Diseases.—The Medical Superintendent's report is attached. The completion early in 1940 of the Tuberculosis Block in the extensions scheme of the Municipal Hospital will set free the Allen Block at the Borough Sanatorium now used for the reception of patients requiring hospital treatment for Pulmonary Tuberculosis, and it will then be possible to erect on its site a new Block with 1, 2 and 4-bedded wards, the urgent need for which for isolation purposes is stressed by the Medical Superintendent in his report.

SECTION B.—II.

Poor Law Medical Relief. No change has been made in the arrangements detailed in previous reports. There are eight Medical Relief Districts, the District Medical Officers assigned to each being private medical practitioners, the three serving the central area of the Borough attending each morning except on Sundays at a Consulting Room at the Public Assistance Committee's Offices. There were during the year 8,163 consultations at Surgeries and 4,278 visits by the District Medical Officers to patients' homes. Except in the Eastwood area, the prescriptions are made up by chemists on the National Health Insurance Acts panel. The question of the adoption of the panel system of providing domiciliary medical relief has not been further considered.

Vaccination.—The Districts remain unchanged as follows:—Eastern, Central, Leigh, Eastwood, and Shoeburyness. The Vaccination Officer has submitted the following return to the Registrar General:—

(a) Return showing the number of persons successfully vaccinated and re-vaccinated at the cost of the rates during the year ended September 30th, 1938.

District	Successful Primary Vaccinations			Successful Re-Vaccinations
	Under one year of age	One year of age and upwards	Total	
Southend East	68	39	107	13
„ Central	62	18	80	10
„ Leigh	11	6	17	1
„ Eastwood	17	3	20	—
„ Shoeburyness	23	13	36	7
Totals	181	79	260	31

(b) Return respecting Vaccination of 1,406 Children whose births were registered during the year 1937.

Successfully vaccinated ...	325	Postponement on Medical certification ...	21	
Insusceptible of Vaccination	4	Removal to other districts:—		
Had Smallpox ...	—	Known ...	35	
Statutory Declaration of Conscientious Objection ...	899	Unknown ...	42	
Died unvaccinated ...	37	Unaccounted for ...	43	
Number of certificates of successful primary vaccination of children under 14 received during 1938 ...				442
Number of statutory declarations of conscientious objections received during 1938 ...				866

SECTION B.—III.

1. *Midwifery Service.*

(a) *Midwives Acts, 1902-1926.* Forty-two midwives, including two resident in the County Council's area, notified their intention to practise in the County Borough during 1938; of these nine were whole-time Municipal Midwives, twelve were permanent and three temporary members of the resident staffs of Nursing Homes, and 18 were engaged in private practice.

Of the 18 engaged in private practice, five surrendered their certificates during the year, having previously attended 20 cases in the capacity of midwife and 10 in the capacity of maternity nurse. Of the remaining 13, three had no cases during the year in either capacity; and the other 10 attended 31 cases in the capacity of midwife, and 46 in the capacity of Maternity Nurse, one attending 18 patients, two 15 patients, two 8 patients, one 7 patients, two 2 patients, and two 1 patient.

(b) *Inspection of Midwives.*—The woman Assistant Medical Officer made 87 routine visits of inspection and three special visits to the midwives resident and practising in the Borough. No case of serious infringement of the Rules of the Central Midwives Board came under notice during the year.

(c) *Payment for Medical Aid for Midwives.*—Medical aid was sought by midwives in accordance with the regulations of the Central Midwives' Board upon 182 occasions, or in 41.1 per cent. of the cases attended by them, as follows:—

Condition of infant:—

Discharge from Eyes	...	...	...	...	18
Prematurity, debility or congenital defects	...	...	...	...	4
Unsatisfactory Condition of Infant	...	...	...	...	8
					30

Maternal conditions:—

During pregnancy—

Albuminuria	...	...	...	...	...	15
Hæmorrhage	...	...	...	...	...	6
Miscarriage	...	...	...	...	...	11
Threatened Abortion	...	...	...	...	...	1
Inflamed Breast	...	...	...	...	...	1
General condition unsatisfactory	...	...	...	...	...	7
						41

During labour:—

Perineal tear	...	...	...	...	...	52
Difficult labour	...	...	...	...	...	28
Retained placenta	...	...	...	...	...	7
Hæmorrhage	...	...	...	...	...	2
Prolapse of Cord	...	...	...	...	...	3
Hysteria	...	...	...	...	...	1
Uterine Inertia	...	...	...	...	...	1
						94

During puerperium :—

Pyrexia	...	...	...	...	...	...	8
Hæmorrhage	...	...	...	...	...	...	4
Inflamed veins of legs	...	...	...	...	...	...	2
Collapse of patient	...	...	...	...	...	...	1
General condition unsatisfactory	...	...	...	...	...	...	2
							17

In addition, the following notices were received from midwives pursuant to the regulations of the Central Midwives' Board:—

Notice of still-birth	...	...	...	...	...	14
„ liability to be a source of infection	...	...	...	...	...	10
„ artificial feeding	...	...	...	...	...	7
„ death	...	...	...	...	...	1
„ having laid out a dead body	...	...	...	...	...	1
						33

In 155 instances in which medical aid was sought by midwives the fees of the doctors were, in accordance with the Midwives Act, 1918, paid by the Corporation. The total sum paid to doctors by the Corporation in respect of medical aid to midwives during the year amounted to £181 8s. 6d., compared with £153 7s. 0d., £115 5s. 0d., and £90 6s. 6d. in each of the three preceding years, of which £2 17s. 6d. was for first visits to infants with Ophthalmia and was consequently not required to be refunded by the parents pursuant to the resolution of the Maternity and Child Welfare Committee of September, 1926.

The relatives were asked to refund £178 11s. 0d., but on representations by them that they were unable to pay, the Committee, after consideration of reports by the Civic Guild of Help, remitted accounts in 71 cases, either partially or entirely, the total remissions amounting to £82 2s. 0d. Of the balance £96 9s. 0d. due to be refunded, £60 16s. 6d. had been repaid by the end of the year.

Of the balance outstanding from previous years, £14 5s. 0d. was paid, £29 16s. 0d. was remitted by the Committee after consideration of reports from the Civic Guild of Help as to the financial circumstances of the patients, while £10 1s. 0d. remained outstanding at the end of the year.

(d) *Midwives Act, 1936.*

1. *Surrender of Certificates.* During the year five midwives voluntarily surrendered their certificates in accordance with section 5 (1) of the Act, and were paid compensation amounting to £256 3s. 1d., £295 3s. 6d., £191 10s. 0d., £136 16s. 6d., and £68 6s. 6d. respectively.

No midwives were required by the local authority to surrender their certificates under section 5 (2) of the Act.

2. *Municipal Midwives.* The provision made for a domiciliary service of whole-time midwives was fully described in the report for 1937, and there were no material changes in the scheme during the year under review. Of all the domiciliary cases attended by midwives as such, 88 per cent. were attended by the Municipal Midwives, who also attended about 35 per cent. of the cases attended as Maternity Nurses.

The percentage of cases attended by the Municipal Midwives as midwives steadily increased during the year, due to a large extent to private midwives giving up practice on surrender of their certificates, and in the light of experience as the year progressed it became evident that if the Minister made an Order under section 6 of the Act prohibiting unqualified persons from acting as maternity nurses for gain, it would be necessary to increase the number of Municipal Midwives. Application was not made, therefore, for an Order under section 6, but was deferred for consideration by the Committee when the matter of post-certificate instruction was dealt with.

The following tables show the number of cases attended and the number of visits paid by the Municipal Midwives during the year:—

(1) Number of cases attended:—

	As Midwives		As Maternity Nurses	
	Labours	Mis-carriages	Labours	Mis-carriages
Cases booked by Municipal Midwives and delivered by them	320	7	89	4
Cases booked by one Municipal Midwife but delivered by another in the absence of the former on leave	44	—	6	1
Cases booked by non-Municipal Midwives but delivered by Municipal Midwives owing to former not being available	2	—	—	—
Cases where no arrangements for confinement had been made and Municipal Midwives were summoned in emergency	8	—	1	2
Totals ...	374	7	96	7

(2) Number of visits paid:—

	To own cases	To other Municipal Midwives' cases when acting as relief	Total
(a) Ante-natal	4,708	218	4,926
(b) Morning Nursings ...	5,647	527	6,174
(c) Evening Nursings ...	1,373	105	1,478
Total	11,728	850	12,578

(3) Number of attendances at Ante-natal Clinics:—

(a) Municipal Health Centre	...	...	242
(b) Leigh Centre	...	...	25
(c) Shoeburyness Centre	...	...	9

(4) Number of attendances at Infant Welfare Clinics:—

(a) Municipal Health Centre	...	...	30
(b) Leigh Centre	...	...	50
(c) Shoeburyness Centre	...	...	23

The fees due in respect of cases attended in 1938 amounted to £784 8s. 0d. and arrears amounting to £2 17s. 0d. were brought forward from the previous year, a total to be collected of £787 5s. 0d. Of this, £721 10s. 6d. was collected by the Midwives, £31 10s. 6d. was collected by the Public Health Department after the Midwives had ceased attendance, £24 16s. 0d. was written off as irrecoverable after consideration by the Committee of the financial circumstances and £9 8s. 0d. remained unpaid at the end of the year. In addition, the midwives collected £25 7s. 6d. as deposits for cases booked for 1939. In 36 cases, the Maternity and Child Welfare Committee, after consideration of the financial circumstances of the families, provided the services of Municipal Midwives free of charge, in 9 cases no fee additional to the deposit already paid was required, and in 12 cases services were provided at reduced fees as follows:— 1 at £1 11s. 6d., 2 at £1 1s. 0d., 4 at £1 0s. 0d., 1 at 17s. 6d., 1 at 15s. 0d., 1 at 10s. 0d. and 2 at 5s. 0d.

2. *Unmarried Mothers.*

During the year nine unmarried mothers with their infants were maintained at St. Monica's Girls' Shelter for a total period of 1,044 days at a cost to the Maternity and Child Welfare Committee of £129 6s. 6d., in addition to the charge of 6d. per day for the retention of 5 beds at the home, or a total cost of £174 19s. 0d.

3. *Maternal Mortality.*

There were no deaths from Puerperal Sepsis, whilst the number of deaths due to parturition or diseases of pregnancy is given by the Registrar General as four, giving a maternal death rate of 2.55 per 1,000 births (live and still) as compared with 2.97 for the country generally. Five of the deaths registered during the year would, however, appear to be classifiable as maternal deaths, as under:—

Age	Previous pregnancies	Period of pregnancy	Cause of death	Remarks
45	1	38 weeks	Intestinal obstruction following Cæsarian Section for central Placenta Prævia.	Midwife's case. Admitted to hospital on occurrence of hæmorrhage. Cæsarian Section on admission. Death 10 days later.
29	3	Full-time	Post-partum hæmorrhage. Obstetric shock.	Normal delivery in Hospital followed by severe hæmorrhage before expulsion of placenta. Death 3 hours after delivery.
37	6	34 weeks	Ante- and post-partum Toxæmia. Placental degeneration.	Admitted to hospital as a case of Ante-partum hæmorrhage. Still-born infant delivered 8 days later with death 4 days later.
40	1	Full-time	Shock following Cæsa-rean Section.	Admitted to Hospital for Cæsarian Section for Flat Pelvis. Previous delivery was by Cæsarian Section. Died 20 hours after operation.
37	1	38 weeks	Bilateral Lobar Pneumonia. Cæsarian Section for Placenta Prævia.	Admitted to Hospital for severe Ante-partum hæmorrhage. Cæsarian Section 6 hours later. Death from Pneumonia 7 days later.

4. *Work of Health Visitors.*

The arrangements available were set out in detail in the report for 1930. Particulars of the work carried out by the Council's Staff of 12 Health Visitors in connection with the Home Visiting of infants, young children and expectant mothers are set out below:—

No. of infants noted for visiting (including new arrivals from other towns)	1,534
„ infants visited for first time in 1938	1,364
„ infants visited during 1938	2,248
„ visits to infants under one year	6,348
„ children visited between 1-5 years	3,741
„ visits to children between one year and five years of age	8,205
„ expectant mothers visited for first time in 1938	547
„ expectant mothers visited during 1938	627
„ visits to expectant mothers	1,229

The visits of the Health Visitors to homes in which cases of infectious disease occurred were as follows:—

Disease	No. of cases visited			No. of cases home nursed			No. of visits			Total visits
	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	
Chickenpox ...	44	155	—	—	—	—	68	208	—	276
Measles	103	211	—	—	—	—	170	272	—	442
Pneumonia ...	24	15	51	—	—	—	48	21	74	143
Whooping Cough...	56	38	—	—	—	—	77	58	—	135
Scarlet Fever ...	30	127	10	—	—	—	132	512	37	681
Typhoid Fever (Contacts)	—	—	—	—	—	—	—	—	—	—
Mumps	13	86	—	—	—	—	16	114	—	130
Ophthalmia Neonatorum including suspected cases	13	—	—	—	—	—	28	—	—	28
Diphtheria ...	2	17	—	—	—	—	3	26	—	29
Puerperal Fever ...	—	—	—	—	—	—	—	—	—	—
Tuberculosis ...	1	23	146	—	—	—	4	129	716	849

(1) Infants and Children under 5 years. (2) School Children. (3) Adults.

5. *Infant Life Protection.*

The Health Visitors act as Infant Life Protection Visitors under Part I. of the Children Act. Particulars of the work carried out during the year are as follows:—

	Foster-mothers.	Children.
No. on Register on January 1st, 1938 ...	90	172
„ Register on December 31st, 1938 ...	97	174
No. of Reception Notices received ...		584
„ Notices of Death		—
„ Notices of removal of children ...		546
No. of Notices re removal of foster-mothers :—		
(a) To other addresses in the Borough		27
(b) To other addresses outside the Borough		3
„ visits paid by Health Visitors ...		2,108

At the end of the year, 25 foster-mothers had the care of more than one child, eleven having two children, 3 three children, 3 four children, 1 five children, 4 seven children, 1 eight children. and 2 nine children.

6. *Boarded-out Children.*

The Health Visitors also carry out for the Public Assistance Committee the visiting of children boarded-out pursuant to the Public Assistance Order. Particulars of the work carried out in this connection are as follows:—

	Jan. 1st, 1938	Dec. 31st, 1938
No. of foster-mothers	14	14
„ children	23	23
„ visits paid by the Health Visitors		241

The Health Visitors also paid 26 visits to the homes at which 6 children had been boarded-out by the Education Committee pursuant to the Children and Young Persons Act.

SECTION B.—IV.

REGISTRATION OF NURSING HOMES.

The following changes were made in the Register during the year, viz.:—

Additions to Register—One new Home was registered, three Homes were re-registered on change of proprietorship and one Home on change of name.

Removals from Register—There were four cancellations, three on change of proprietorship and one on change of name.

The Woman Assistant Medical Officer continues to act as Inspector of Nursing Homes and made 36 routine visits and 9 special visits during the year. On December 31st, there were on the Register 15 Nursing Homes, of which one received Maternity patients only and nine were Nursing Homes at which Maternity patients were received. One application for registration was refused on the ground that the applicant, who had recently been convicted of the theft of linen from a Hospital at which she had been employed as a temporary nurse, was not a fit person to have charge of a Nursing Home.

SECTION C.

SANITARY CIRCUMSTANCES OF THE AREA.

Water Supply.

The Southend Waterworks Company, which serves the greater portion of the area of the County Borough, gave a constant supply throughout the year. Samples are examined on alternate days at the Borough Sanatorium and have given consistently good results both bacteriologically and chemically. The water is obtained from the Rivers Blackwater, Chelm and Ter, and its purification at the Langford Works is under daily supervision at the works by chemists, samples being also examined at regular intervals by Dr. Suckling at the Counties Public Health Laboratories, whose report on a sample taken at the end of the year was as follows:—

					Parts per 100,000.
Turbidity	...	...	...	...	Clear and bright.
Colour	...	...	...	...	Normal.
Odour	...	...	...	...	Nil.
Reaction pH	...	...	...	...	On the alkaline side of neutrality : 8.3
Free Carbonic Acid	...	...	...	...	—
Electric Conductivity at 20°C.	...	...	...	...	445
Total Solids, 180°C.	...	...	...	...	30.0
Chlorine in chlorides	...	...	...	...	3.5
Nitrogen in Nitrates	...	...	...	...	0.60
Nitrites	...	...	...	...	Trace.
Hardness : Permanent	...	...	...	...	12.5
Temporary	...	...	...	...	2.0
Total	...	...	...	...	14.5
Metals	...	...	...	...	Iron : 0.005
Free Ammonia	...	...	...	...	0.0160
Albuminoid Ammonia	...	...	...	...	0.0088
Oxygen absorbed in 4 hrs. at 80°F.	...	...	...	...	0.115
Free Chlorine	...	...	...	...	0.1 p.p.m. approx.
No. of Bacteria per c.c. :—					
On agar in 3 days at 20°C.	...	...	...	...	3
On agar in 24 hours at 37°C.	...	...	...	...	0. 2 days at 37°C. 0.
The Bacillus Coli	...	...	...	...	Absent in 100 c.c.
Bacillus Welchii	...	...	...	...	Absent in 100 c.c.
(B. Enteritidis Sporogenes).					

REPORT.—The sample is clear and bright and of normal colour. The water is very faintly alkaline in reaction, of moderate hardness, contains no excess of saline matter in solution and no metals apart from a negligible trace of iron, and is of satisfactory organic quality and the highest standard of bacterial purity. It is therefore considered a pure and wholesome water suitable for drinking and domestic purposes.

After negotiations with the owners and the Waterworks Company, the Company's mains are being extended on the North Shoebury Road so as to enable certain houses hitherto dependent on shallow wells to be connected thereto. A few houses in the Eastwood area are still dependent on shallow wells yielding water which is of doubtful purity and inadequate in quantity at certain seasons of the year; negotiations with the owners are in progress with a view to these houses also being connected to the Company's mains.

The Shoeburyness area of the Borough is supplied by the Council's Waterworks at Shoeburyness. The yield from the deep well and bore hole is from 6,500 to 6,800 gallons per hour or about 156,000 gallons per day. The demand has for several years past exceeded this supply for certain periods, as for example during 9 weeks in 1936 and 16 weeks in 1937, whilst in 1938 the demand was near or above this supply continuously from 1st April till the end of the year. In previous years the difference between the supply and the demand has had to be met either by forcing the plant in the bore hole and well or by obtaining water from the bore tube on the War Department's property; during 1938 no water has been thus purchased from the War Department, the excess demand being met partly by forcing the plant in the existing bore hole and well, and partly by temporary plant installed in a new bore hole which, as mentioned in last year's report, has been sunk in the immediate vicinity of the old bore hole.

This new bore hole is sunk as under:—

- (1) From ground level to a depth of 77 feet, a 15-inch sealing tube which penetrates about 5 feet into the blue London clay.
- (2) Inside the sealing tube, from ground level to 600 feet below ground, a 10-inch internal diameter bore hole tube, perforated from a depth of 405 feet to a depth of 585 feet below ground level.
- (3) From a depth of 595 feet below ground level to a depth of 700 feet, an 8-inch plain tube driven through the chalk.

The new bore hole was completed in May when a temporary air lift was installed, and remained in operation till December when it was removed in order to permit of the erection of a pump house surrounding the new bore hole. The water from the new bore hole is of a high degree of purity as shown by the following results obtained on analysis:—

Chemical :

Reaction, Alkaline	...	...	...	pH 8.5
Electric Conductivity	...	...	...	1470
Total Solids, 180°C.	...	...	...	98 parts per 100,000
Chlorine in Chlorides	...	...	...	32 parts per 100,000
Nitrogen in Nitrates	...	...	...	Nil.
Nitrites	...	...	...	Absent.
Hardness : Permanent	...	...	...	0.0
Temporary	...	...	...	2.5
Total	...	...	...	2.5
Free Ammonia	...	...	...	0.0520
Albuminoid Ammonia	...	...	...	0.0016
Oxygen absorbed in 4hrs. at 80°F.	...	...	...	0.235

Bacteriological :

No. of bacteria per c.c. :—

On agar in 3 days at 20°C.	...	2
On agar in 1 day at 37°C.	...	1
On agar in 2 days at 37°C.	...	2
Bacillus Coli	...	Absent in 100 c.c.
Bacillus Enteritidis Sporogenes	...	Absent in 100 c.c.

In July, on the recommendation of the Council's responsible officers, the Committee engaged Dr. Ernest Suckling to make an

inspection of the Works and to advise as to whether or not as an additional safeguard chlorination of the water should be instituted.

The routine examinations which have been carried out at frequent intervals of the water from the Shoebury Waterworks since the latter came under the control of the Council have shown from time to time that the water has not always been of the high standard of bacterial purity which is advisable in a public supply; any unsatisfactory report has led to a careful examination of the works with a view to the discovery of the cause of the apparent deterioration in the bacterial purity of the water and on every occasion it has been found possible to trace the source of the trouble, as, for example, birds obtaining access to the tank in the water-tower owing to a gap in the cover, accumulation of debris, etc., in old service mains, etc.; at no time consequently was there any real ground for suspicion that the water as yielded by the bore tube was polluted although the possibility of this could not be disregarded, particularly having regard to the age of the bore tube, the alkaline character of the water and the neck of the bore tube having become defective by corrosion. The Council's officers under these circumstances and in view of the issue by the Ministry of Health of Circular 1674 deemed it necessary to advise the Water Committee to secure the services of Dr. Ernest Suckling to report as to the advisability of the water being chlorinated.

Dr. Suckling made an inspection of the Works on June 16th and in view of all the circumstances advised that chlorination be adopted as a precautionary measure and this recommendation was duly accepted by the Committee. The necessary temporary plant was at once installed and as advised by Dr. Suckling various by-passes are being removed so as to ensure that all water from the bore tube receives an appropriate dose of chlorine before passing into distribution. The Committee has authorised the installation of permanent chlorinating plant with automatic control and a recording device, but at the end of the year this had not been delivered.

Sewerage.

The main sewer from Shoeburyness to the Prittlewell Sewage Disposal Works is still under construction as also are the new sewage pumping stations at Ness Road, Rampart Street and Thorpe Hall; these works were, at the end of the year, nearing completion and it is hoped they will come into commission during the autumn. The soil and surface water drainage of the Arterial Road is also nearly complete and it is hoped shortly to commence the sewerage of Prince Avenue, Section II, which, when finished, will complete the sewerage of the main road from Cuckoo Corner to the western borough boundary. The new storm water sewer from Canewdon Road to the foreshore has been completed and it is anticipated that no further trouble will arise during heavy rainfall from the severe flooding of this road. During the year, the following lengths of sewers were laid:—

	Soil Sewers	Surface- water Sewers
Private Street Works—yards	520	7,485
Estate Sewers (private enterprise)—yards ...	1,338	1,286
Sewers laid by Corporation—yards	885	2,645
Total—yards ...	2,743	11,416

or a grand total of 8 miles 79 yards.

Public Mortuary.

During the year 134 bodies were received in the Public Mortuary and 80 autopsies were conducted thereat.

House Boats.

The use of improvised dwellings of converted barges and other craft moored in the Leigh Creek continues, and the position remains practically the same as in recent years. Three of the boats have changed their moorings, two boats were accidentally burnt out, one derelict boat was purposely fired, two have been demolished and two boats have gone. There would therefore appear to have been a reduction of seven during the year. It is understood that the Council's legal department still have the matter in hand.

Refuse Removal.

The following statistics as to the work carried out during the year in connection with the collection of refuse have been supplied by the Cleansing Superintendent in the Borough Surveyor's Department.

<i>House Refuse.</i>	1935	1936	1937	1938
No. of working days	306	308	308	306
Men employed—daily average ...	108.05	117.3	120.5	124.5
Horses „ „ „ ...	0.4	0.43	0.17	Nil.
Houses visited „ „ „ ...	6,073	6,439	6,696.5	6,928
Bins emptied „ „ „ ...	6,746	7,129	7,383.5	7,633

Trade Refuse.

Loads—daily average	10	11	11	11
Bins „ „ „ „ ...	4	7	38	52

Total Refuse.

Weight in tons—daily average ...	115.45	121.3	120.3	109.3
----------------------------------	--------	-------	-------	-------

The weight of Fish offal collected was 259.65 tons, as compared with 241.45 tons, 202.55 tons and 230.2 tons in the three previous years; 52 premises are visited regularly for the removal of fish offal, 9 being cleared daily, 21 on 3 days a week and 20 on one day a week.

No increase in the number of Refuse Collecting vehicles has taken place during the year but in December a Morris van which had been in use since 1926 was withdrawn from service. A trial made in September with a 24 cubic yard S.D. Freighter obtained on loan for the purpose showed the economy of using vehicles of greater capacity than the majority of the present vehicles, par-

ticularly in dealing with refuse of the light nature which has to be dealt with in this Borough.

Refuse Disposal.

Consequent on the work of the modernisation of the Prittlewell Refuse Disposal Works, which was commenced during the last quarter of 1957, being in progress, it was necessary as foreshadowed in last year's report to dispose of the refuse from the Western area of the Borough by the controlled tipping method on a site on the Leigh Marshes. The tipping of refuse on this site was commenced on February 18th and up to the end of the year 3,165 loads of house and trade refuse were thus disposed of, being deposited to a depth of six feet and covered with clinker and ash to permit of its being consolidated by vehicles traversing the tip; a large quantity of excavated material was also deposited by Public Works Contractors and was used for surfacing. At the end of the year approximately 3,000 square yards of low lying ground had been raised to the level of the adjoining land; the appearance of the tip has at all times been satisfactory, no nuisance has been caused and no complaints received. The fish offal on collection is conveyed to the Refuse Disposal Works and removed three times weekly by a firm of London Contractors. The remainder of the house, trade and garden refuse collected was disposed of in the Destructor, a total weight of 28,044 tons being thus dealt with, of which 46.35 tons were of garden refuse.

Sanitary Inspection.

Complaints received and attended to	1,380
Complaints referred to Highways Department	75
Frivolous complaints received	33
Nuisances detected without complaint	1,031
Nuisances abated on notice	1,287
Nuisances abated without notice	1,078
Preliminary notices served	811
Notices not complied with but being dealt with	10
Houses affected by notice	913
Houses inspected under Public Health Acts	2,118
Houses, number inspected under Housing Acts	533
Statutory notices served	11
Visits of inspection made during the detection and abatement of nuisances	21,065
Notices served under Section 9, Housing Act, 1936	14

Work done in connection with the Drainage of Premises.

Houses, drains tested :—	
After infectious diseases	327
By request on payment of fee	16
On complaint or alteration of drainage	643
Number of houses re-drained	117
Number of houses, drains repaired	224
Total length of drain tested with water	8,482 feet
New inspection chambers built	385
New gullies fixed	377
New covers to inspection chambers provided	198
Inspection chambers rendered	234
New soil pipes provided	133
Vent pipes unblocked	53
New W.C. pans and traps provided	252

New flushing cisterns provided	212
New lavatory basins provided	103
W.C.'s made open risers	51
New W.C.'s erected	98
New baths provided	52
New sink waste pipes provided	131

*Housing. The following defects were remedied and
Improvements carried out.*

Defective flushing cisterns repaired	67
W.C.'s floors paved	119
Blocked drains cleared	321
New sinks provided	72
Defective guttering repaired, houses	106
Defective rainwater pipes repaired	87
Defective roofs repaired	132
Yards paved and repaired	153
New floors to houses	33
Cement plinths to houses provided	74
Scullery floors repaired and relaid	37
Stoves repaired or renewed	51
Copper furnaces repaired	46
New sanitary ash bins provided	228
New gutters provided	95
Walls to houses rendered	51
Sash cords renewed	177
Air bricks provided	162

With respect to Dirty Houses.

Houses cleansed	46
Rooms cleansed	253
Ceilings cleansed	194
W.C. pans cleansed	79
W.C. apartments cleansed	67
Rooms measured as to overcrowding	1,334
Overcrowding in rooms abated	29

*In connection with the Water Supply the following work
has been carried out.*

Houses, re-connected to Water Company's mains	22
Houses, water laid on from Company's mains	5

With respect to the Keeping of Animals.

Removal of animals improperly kept	20
Stables, yards paved or paving repaired	14
Pig Styes cleansed and lime washed	155
Inspections of piggeries	348
Notices served <i>re</i> removal of manure under Section 79	—
Accumulation of manure removed and owners charged with costs	—

Schools.

Schools, sanitary conveniences, inspections	429
--	-----

Particulars as to enquiries with respect to Infectious Diseases.

Enquiries <i>re</i> infectious diseases	409
„ „ smallpox contacts	17
„ „ other contacts	176

Miscellaneous.

Smoke observations	68
Cesspools, emptied and filled in	37
Cesspools, inspections	225
Marine Store Dealers' premises, inspections	27
Visits to Gipsy vans	21
Offensive trades premises, inspections	387
Butchers' premises inspected	2,434
Fishmongers' premises inspected	485
Fruiterers' premises inspected	330

Stables, inspections	...	...	...	...	...	256
Ice Cream vendor's premises, inspections	...	...	...	...	...	276
Public House urinals, inspections	...	...	...	...	...	331
Refreshment houses, inspections	...	...	...	...	...	372

Disinfection of Houses.—The number of rooms disinfected during the year was 1,138 in 744 houses, including 519 rooms in 197 verminous houses, also 145 rooms in 116 houses after removals or deaths of patients suffering from Pulmonary Tuberculosis. The number of articles subjected to steam disinfection at the Disinfection Station was 20,896.

Drain Testing.—The drains of houses are tested whenever there is any reason to suspect any defect, and also on occurrence of any notifiable disease among the residents. Of 327 houses, the drains of which were examined as a routine measure on account of occurrence of infectious disease, 282 were found to be in good order, 33 had trivial defects, whilst in 12 instances it was considered necessary for the drains either wholly or in part to be relaid.

Common Lodging Houses.—There is no registered Common Lodging House in the Borough, but a lodging house which the owner denies comes within the definition is subject to regular inspection to ensure that it is kept in compliance with the Bye-laws.

Offensive Trades.—There are 59 fish-frying premises on the register and these are all subject to routine inspection. With two or three exceptions, the apparatus is of modern design, and as far as possible effluvium is prevented. Thirty-eight of the premises are licensed, and of these, thirty-four are subject to annual renewal of the licence, pursuant to Section 44 (2) of the Public Health Act, 1925.

There are no other premises in the borough at which an offensive trade is carried on; there are 4 premises of marine store dealers who do not now collect bones or offensive rags.

Rag Flock Acts, 1911 and 1928.

No samples of rag flock were taken during the year, visits of inspection to Upholsterers' premises shewing that no rag flock was being used except for the re-making of mattresses.

Factory and Workshops Acts.

1. *Inspection of Factories, Workshops and Workplaces.*

		No. of		
		Inspections.	Written Notices.	Prosecutions.
Factories (including	Factory			
Laundries)	...	287	6	—
Workshops (including	Work-			
shop Laundries)	...	326	3	—
Workplaces other than	Out-			
worker's premises included		413	8	—
in Part II. of this report				
	Totals	1,026	17	—

II. *Defects found in Factories, Workshops and Workplaces.*

Nuisances under the Public Health Acts :—

	Found.	Remedied.	No. of Defects referred to H.M. Inspector	No. of Prosecu- tions
Want of cleanliness ...	19	19	—	—
Want of ventilation ...	1	1	—	—
Overcrowding ...	1	1	—	—
Want of Drainage to floors ...	2	2	—	—
Sanitary Accommodation—				
Want of accommoda- tion ...	1	1	—	—
Insufficient ...	—	—	—	—
Unsuitable or defective	4	4	—	—
Not separate for sexes	1	1	—	—
Other offences ...	6	6	—	—
Total ...	35	35	—	—

III. *Home Work.*

Addresses of outworkers received from employers ...	15
Addresses of outworkers received from other Councils ...	66
Addresses of outworkers forwarded to other Councils ...	1
Outwork in infected premises, instances ...	—
Orders made (Section 110) ...	—
Outwork in unwholesome premises, instances ...	—
Prosecutions ...	—
Inspection of outworkers' premises ...	151

IV. *Registered Workshops on the Register at the end of the year.*

Workshop Bakehouses ...	10
Workshop Laundries ...	2
Cabinetmaking Workshops ...	14
Dressmaking Workshops ...	25
Boot Repairing Workshops ...	34
Tailoring Workshops ...	28
Cockle Boiling Workshops ...	—
Miscellaneous ...	101
Total number of Workshops on Register	228

Shops Acts.

Each of the Sanitary Inspectors acts as an Inspector under the Shops Acts and particulars of the work carried out during the year are as follows:—

I. *Shops Acts, 1912 and 1913.*

No. of infringements detected and cautions given ...	376
--	-----

II. *Shops Act, 1934.*

Number of visits of inspection ...	683
Number of shops at which :—	
(a) new W.C.'s were provided on notice ...	18
(b) W.C.'s were cleansed or repaired on notice ...	15
Number of shops at which on notice :—	
(a) facilities for washing were provided ...	11
(b) facilities for heating were provided ...	7
Number of shops at which young persons were found to be employed in excess of permitted hours ...	17
Number of shops at which failure to exhibit prescribed notices was detected ...	91
Number of re-visits to shops to ensure exhibition of notices ...	203

III. *Shops (Sunday Trading Restrictions Act), 1936.*

Number of visits of inspection	3,896
Number of infringements and cautions given	686
Number of re-visits to shops to ensure exhibition of notices and the keeping of records	1,569

Offices.

The visits of inspection to premises used as offices to ensure compliance with section 46 of the Public Health Act, 1936, numbered 63; notices were served in 13 instances to repair or cleanse the sanitary conveniences and in 4 instances to provide new water closets, all the notices being complied with in due course.

Camping Sites.

There are four sites in the Borough which are regularly used for camping but at the height of the season tents, etc., are pitched on many other sites by cyclists and trippers who remain, however, only for one or two nights; in some instances the tents are pitched on vacant building plots in close proximity to residential areas, and the practice leads to the plots becoming littered but only in exceptional instances is any statutory nuisance caused. Of the four sites in regular use only one was licensed; an application for a licence in respect of one of the other sites was not granted pending the provision of a more adequate water supply; the other sites were only used for a few weeks during the height of the season and then merely at week-ends only. In the case of the three unlicensed camps, steps were taken to ensure that the Council's byelaws relating to tents, vans, etc., were complied with.

The licensed camp is on a site of three meadows with an area of about 12 acres; the majority of the campers bring their own tents and camping equipment; there are about 26 wooden structures on the site which are used by their owners as sleeping huts; in addition there are a number of trailer caravans. There are in convenient situations stand-pipes for drinking water from the mains; an adequate number of refuse receptacles are provided, being emptied daily by the Corporation's Cleansing Department; ranges of urinal buckets and pail closets are provided, the contents of which are emptied twice daily into a pit, alternate layers of lime and earth being used to cover the excreta and the pit being filled in when the deposit is within two feet of the surface. Ablution and other waste water is collected in metal tanks which are emptied daily by the Cleansing Department down a manhole of the nearest sewer. A staff of twelve men is employed to attend on campers, to collect and to dispose of litter, to empty and cleanse the pail closets, etc., and generally to police the camp. The average number of persons occupying the camp at one time during the summer season is estimated to be about 1,200, but during August Bank Holiday week the number approximates to 3,000. The camp is well managed and the stringent conditions of the licence appear to be carefully observed.

The maximum number of persons who at any one time occupy camping sites in the Borough is estimated to be 3,500, this number being reached only during the August Bank Holiday week.

Eradication of Bed Bugs.

During the year, 519 rooms in 197 houses, including 23 Council houses, were disinfested by the Council's Disinfecting Staff for the eradication of bed bugs. Twenty-seven notices were also served on Owners and Occupiers calling upon them to eradicate bugs from rooms in their houses, all of which were complied with.

The method adopted is to require all the walls of rooms to be stripped of wall paper, picture rails and skirting boards to be removed, and architraves and framing around windows to be loosened, after which the walls and ceilings are thoroughly sprayed with an insecticide. Sulphur candles are then burnt in the room which is effectually sealed and left for some 12 to 14 hours before the same is opened. Bedding is then removed to the Council's Disinfecting Station for steam disinfection, and all paper stripped from the walls is burnt. Occupiers are then advised as to the thorough cleansing of all floors, woodwork, furniture, bedsteads, etc., and also to keep close observation so as to detect any bugs which may have survived the fumigation. In bad infestations, a further spraying of the rooms is carried out after an interval of ten to twelve days in order that any bugs hatched out in the interval may be destroyed, and repeated visits are made to the premises until there is reason to believe the disinfestation has been successful.

The Housing Superintendent inspects the houses occupied by prospective tenants of Council houses, and reports any instance in which disinfestation of furniture, etc., appears to be advisable before removal to the new house.

Schools.

Reference is made in the accompanying report of the School Medical Officer to the sanitation of the schools. The sanitary conveniences and playgrounds of the elementary schools are inspected weekly by the Sanitary Inspectors and any sanitary defect brought to the notice of the Education Department.

Swimming Baths, Etc.

The only swimming baths open to the public are those owned by the Council, *viz.*: two bathing pools at Thorpe Bay and Leigh-on-Sea respectively, which are tidal, and the open-air swimming bath at Westcliff at which plant to ensure adequate filtration and sterilization, in addition to heating, was installed in 1936. Examinations of the water shew that the plant is operating satisfactorily.

SECTION D.

HOUSING.

General.

The housing position has not materially changed during the year except that since the crisis in September the erection of new houses has almost entirely ceased; the conversion of some of the larger houses into flats has, however, continued, especially in the better-class residential areas. In the central area of the Borough the number of empty houses has increased, the former occupiers in many instances having removed to newly erected houses on some of the recently developed building estates.

Five small houses for aged married couples have been erected by the Corporation in Gainsborough Drive in Prittlewell Ward; each of these houses contains a living room, a bedroom, a scullery with bath, and the usual offices; one garden is provided in the front of the houses for the use of all the tenants, the maintenance of which the Corporation will undertake; each house has also a separate garden at the rear. The rebated rental fixed for the houses is 5s. 0d. per week inclusive of rates and water charges; the houses have been let to persons whose ages rise from 70 to 79 years and whose incomes consist of the Old Age Pension augmented in three instances by allowances from the Public Assistance Committee.

Corporation Housing Estates.

Except on the Sutton Road Estate which is in the central area of the Borough, there is now very little unsatisfied demand for the Council's houses as will be seen from the following table which gives the number of applications which were in possession of the Housing Committee on March 31st, 1939. This particularly applies to the Southview Estate, houses on which remained on occasions vacant for periods from one to six weeks before tenants could be secured; on the other estates, vacant houses are usually re-let within a week.

	Numbers in Family							Total Applications
	9	8	7	6	5	4	3	
Sutton Road Estate	1	—	—	3	5	13	49	71
Leigh Estate (original Scheme)	—	—	—	1	1	1	—	3
Leigh Estate (15/- type) ...	—	—	—	—	—	1	4	5
Southview Estate	—	—	—	—	—	—	2	2
Shoeburyness Estate	—	—	—	—	—	—	1	1
Eastwood Estate	—	—	—	—	—	—	—	—
					TOTAL	...	...	82

Overcrowding.

The position as regards overcrowding is shewn in the following table :—

DETECTED IN 1936			
Abated in 1938		Still overcrowded on 31st December, 1938	
No. of houses	No. of persons	No. of houses	No. of persons
7	46	7	64

DETECTED IN 1937			
Abated in 1938		Still overcrowded on 31st December, 1938	
No. of houses	No. of persons	No. of houses	No. of persons
8	60	1	9

DETECTED IN 1938			
Abated in 1938		Still overcrowded on 31st December, 1938	
No. of houses	No. of persons	No. of houses	No. of persons
9	60	4	35

In two instances, the overcrowding detected in 1936 and 1938 respectively was abated by the families being rehoused in Corporation Houses.

The following table shews the degree of overcrowding in the dwellings still remaining overcrowded at the end of 1938:—

First detected in 1936.

Case No.	Permitted No.	No. of occupants.
4	4½ units	6 (6 units)
32	8 „	10 (9 „)
63	5 „	7 (5½ „)
73	3 „	5 (4½ „)
88	7½ „	10 (8 „)
92	7½ „	9 (9 „)
111	7½ „	15 (11 „)

First detected in 1937.

175	6½ „	9 (8 „)
-----	------	----------

First detected in 1938.

205	3 „	4 (3½ „)
210	7½ „	11 (9½ „)
211	10 „	14 (11 „)
215	5 „	6 (5½ „)

Of the four cases first detected in 1938, one was overcrowded before the appointed day, *viz.*, 1st January, 1937, one removed from an overcrowded first-floor tenement to the ground-floor tenement in the same house with the same permitted number, and two became overcrowded owing to a child attaining the age of 10; one of the latter cases occurred at the end of the year in a Corporation house and the family, early in 1939, was re-housed by the Housing and Properties Committee of the Council.

Unfit Houses.

The position at the end of the year as regards the 20 houses scheduled in 1933 as being likely to require demolition within 5 years and the 26 houses and 116 vans, etc., included in the Supplemental Programme (dealing with added areas only) in 1935, together with 15 houses and 5 caravans which were not included in the programme, is as follows:—

	Original Programme		Supplemental Programme				Dwellings not included in Programmes				Totals		
	Houses	Persons Displaced	No.	Houses		Vans, etc.		No.	Persons Displaced	No.	Persons Displaced	Dwellings	Persons Displaced
Demolished after action under Section 19 ...	7	25	16	58	100	358	11	55	5	10	139	506	
Demolished in anticipation of formal procedure ...	—	—	2	15	16	48	2	2	—	—	20	65	
Out of use as a result of undertaking ...	6	14	—	—	—	—	1	—	—	—	7	14	
Made fit ...	2	—	—	—	—	—	1	—	—	—	3	—	
Dealt with by 31.12.38	15	39	18	73	116	406	15	57	5	10	169	585	
Remaining to be dealt with ...	5	10	8	37	—	—	—	—	—	—	13	47	
TOTALS ...	20	49	26	110	116	406	15	57	5	10	182	632	

*Housing Statistics.**I. Inspection of Dwelling-houses during the year.*

(1) (a) Total number of Dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ...	2,651
(b) Number of Inspections made for the purpose ...	2,937
(2) (a) Number of Dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 ...	533
(b) Number of inspections made for the purpose ...	766
(3) Number of Dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ...	7
(4) Number of Dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation ...	347

II. Remedy of Defects during the year without service of formal Notices.

Number of defective Dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers ...	321
---	-----

*III. Action under Statutory Powers during the year.**A—Proceedings under Sections 9, 10, and 16 of the Housing Act, 1936.*

(1) Number of Dwelling-houses in respect of which notices were served requiring repairs ...	14
(2) Number of Dwelling-houses which were rendered fit after service of formal notices :—	
(a) by owners ...	14
(b) by local authority in default of owners ...	—

B—Proceedings under Public Health Acts.

(1) Number of Dwelling-houses in respect of which notices were served requiring defects to be remedied	11
(2) Number of Dwelling-houses in which defects were remedied after service of formal notices :—	
(a) by owners ...	11
(b) By local authority in default of owners ...	—

C—Proceedings under Sections 11 and 13 of the Housing Act, 1936.

(1) Number of Dwelling-houses in respect of which demolition Orders were made ...	2
(2) Number of Dwelling-houses demolished in pursuance of Demolition Orders ...	5

D—Proceedings under Section 12 of the Housing Act, 1936.

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made ...	—
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit ...	—

IV. Overcrowding.

(a) (i) Number of dwellings overcrowded at the end of the year ...	12
(ii) Number of families dwelling therein ...	12
(iii) Number of persons dwelling therein ...	108
	(93½ units)

(b) Number of new cases of overcrowding reported during the year	13
(c) (i) Number of cases of overcrowding relieved during the year	24
(ii) Number of persons concerned in such cases	166
(d) Particulars of any cases in which dwelling-houses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding ...	Nil.
(e) Any other particulars with regard to overcrowding conditions	—

SECTION E.

INSPECTION AND SUPERVISION OF FOOD.

A.—THE MILK SUPPLY.

Milk and Dairies Order, 1926.

The following table shows the number of premises, of inspections, and of notices served during the year:—

Nature of Premises.	No. of Premises.	No. of Inspections.	No. of Notices Served
Cowsheds	11	187	—
Dairies	42	379	—
*Other Shops	528	571	—

* These shops are not liable to registration as Dairies because milk is sold either in sealed bottles only or for consumption on the premises only.

The Milk (Special Designations) Order, 1936.

Licences have been issued by the Council pursuant to this Order as follows:—

	No. of Premises Licensed.
To produce Accredited Milk	5
To bottle and distribute Accredited Milk	1
To distribute Accredited Milk	1
To bottle and distribute Accredited (Tuberculin Tested) Milk	1
To distribute Accredited (Tuberculin Tested) Milk, bottled in the Borough 12; bottled outside the Borough, 6 ...	18
To Pasteurize Milk	5

Samples of the Graded Milks are taken at regular intervals and when the sample is found not to be in accordance with the standard laid down, communications are at once sent to the Vendors calling upon them to investigate the causes which have led to the milk falling below the standard.

Eleven samples of Accredited Milk, 40 samples of Tuberculin Tested Milk and 37 samples of Pasteurised Milk were submitted for examination, and of these one sample of Pasteurised Milk failed to comply with the standard. During the year four samples of raw bottled milk were taken for examination for (a) bacterial count and (b) for the presence of Tubercle Baccilli, but in no case were Tubercle Bacilli found to be present.

B.—MEAT.

Slaughterhouses.

The slaughterhouses in the Borough now number ten, four of which are subject to annual licence, 2,436 visits were paid by the Inspectors during the year, and the premises were found generally to be well conducted, and no notices were necessary.

Slaughter of Animals Act, 1933.

Twenty-eight applications were received for the renewal of licences to slaughter animals in the various slaughterhouses in the County Borough, all of which were duly renewed. One new application for licence to slaughter was granted. The requirements as to the use of a mechanically operated instrument for stunning prior to slaughter are complied with, Cash's captive bolt pistol being the instrument invariably used.

Public Health (Meat) Regulations.

The Regulations are well observed, practically all the retail butchers having made special provision by means of glass fronts to protect their meat from contamination by dust, etc.

Notifications of intended slaughter were received on 352 occasions, and the carcasses examined by the Inspectors numbered 21,613, *viz.*, Beasts 1,067, sheep 8,961, calves 2,699 and pigs 8,886.

Practically all the butchers now consent to the carcasses slaughtered for them in local slaughterhouses being stamped by the Meat Inspectors after examination at the time of slaughter.

The following carcasses brought into the Borough from out-lying districts were also examined at the shops of butchers, *viz.*: pigs 1,357, beasts 225, sheep 833, and calves 327.

The following table shows the carcasses inspected and condemned during the year:—

	Cattle, excluding Cows	Cows	Calves	Sheep and Lambs	Pigs
Number killed	953	114	2,699	8,961	8,886
Number inspected	953	114	2,699	8,961	8,886
<i>All diseases except tuberculosis :—</i>					
Whole carcasses condemned	8	7	6	5	11
Carcasses of which some part or organ was condemned	105	10	3	31	144
Percentage of the number inspected affected with disease other than tuber- culosis	12	15	.3	.4	1.74
<i>Tuberculosis only :—</i>					
Whole carcasses condemned	5	11	18	—	59
Carcasses of which some part or organ was condemned	64	39	23	—	167
Percentage of the number inspected affected with tuberculosis	7.2	44	1.5	—	2.5

C.UNSOUND FOOD.

In addition to the carcasses, etc., condemned at Slaughter-houses the undermentioned quantity of unsound food was surrendered during the year:—

Bruised	Beef, 571 lbs.; mutton, 60 lbs.
Decomposing	Beef, 453 lbs.; pork, 30 lbs.; lambs' livers, 102 lbs.; ox livers, 94 lbs.; pigs' livers, 20 lbs.; ox kidneys, 10½ lbs.; beef suet, 59 lbs.; tripe, 54 lbs.; bacon, 50 lbs.; rabbits, 100; turkeys, 2.
Tinned Food	Milk, 346 tins; corned beef, 86 tins; ox tongues, 10 tins; tomatoes, 17 tins; pork and beans, 37 tins; salmon, 6 tins, jellied veal, 2 tins; asparagus, 1 tin, grape fruit, 1 tin; cherries, 1 tin; fruit salad, 1 tin.
Fish	Haddocks, 84 lbs.; mackerel, 42 lbs.; cod, 42 lbs.; plaice, 28 lbs.; smoked fillets, 28 lbs.; herring roes, 28 lbs.; whiting, 14 lbs.; salmon, 6 lbs.; lobsters, 7 lbs., kippers, 16 boxes.
Miscellaneous	Pears, 6 boxes.

D.—FOOD AND DRUGS (ADULTERATION) ACT.

The number of samples submitted to the Public Analyst was 405 (369 formal and 36 informal) and of these 22 (19 formal and

3 informal) were reported to be non-genuine, *viz.*: 14 (146) samples of milk, 2 (45) margarine, 1 (44) butter, 2 (12) vinegar, 1 (1) informal sample of milk, 1 (1) informal sample of cornflour, and 1 (1) informal sample of bun flour. The figures in brackets denote the total number of samples of the articles which were taken.

The 383 (350 formal and 33 informal) samples found to be genuine comprised samples as under, the figures in brackets representing the number of formal samples included in the total:—

Milk (132), margarine (43), butter 44 (43), malt vinegar (7), wood vinegar (3), sausages (24), cream 14 (11), ground almonds 2 (1), sponge cake (3), luncheon sausage (5), mince meat (1), lard (6), fish paste 7 (2), mixed spice 3 (1), meat paste 3, brawn 5, cheese 7 (6), Shredded Wheat 8 (7), Bun flour 4, cornflour 6, custard powder 4 (3), tea 4 (2), minced meat 3, Lardex 2, table jelly 2 (1), raisins 2, pearl barley 2, mixed herbs 2, thyme 2, sage 1, parsley 1, mint 1, Cookeen 1, dripping 1, rice 1, dried mixed fruit 1, currants 1, prunes 1, muscatels 1, glace cherries 1, cake fruit 1, crystallised ginger 1, chocolate roll 1, coffee 1, lemonade crystals 1, condensed skimmed milk 1, cooked peas 1, baked beans 1, potted meat 1, polony 1, veal and ham pie 1, chicken and ham roll 1, Wiltshire roll 1, saveloy 1, fillets of anchovy 1, dressed lobster 1, blanc mange powder 1, egg substitute 1, curry powder 1, ground cloves 1, bicarbonate of soda 1.

In the cases of the 14 samples of milk reported to be non-genuine, the results of analysis of these samples were as follows:—

Fat abstracted % :—3.7, 3.0, 14.7, 5.0, 6.7, 6.7, 3.3, 3.3, 9.7, 16.7, 13.3, 15.0, 6.7, 92.7

Proceedings were taken against three vendors and one farmer in respect of the four non-genuine milk samples with the following results:—

No.	Result of Analysis.	Result of Proceedings.
6536	14.7% fat abstracted	Fined £2.
6627	6.7% „ „	Dismissed (Hunt v Richardson)
6640	9.7% „ „	Dismissed „
6645	16.7% „ „	Dismissed „

No action was taken in respect of three samples of milk, Nos. 6541, 6543, and 6544, owing to the samples being in bad condition on arrival at the Public Analyst's Laboratory, the figures obtained not being considered reliable.

Cautions were administered in respect of each of the following samples:—

Milk. Fat abstracted % :—3.7, 3.0, 5.0, 3.3, 13.3, 15.0, 6.7.

No action was taken with regard to the two samples of artificial vinegar which were reported to consist wholly of wood vinegar, and one sample each of Margarine and Butter which were reported as containing 0.3% and 0.1% of excess of water respectively.

In the case of one sample of Margarine which was reported as containing 0.4% of excess of water, the Essex County Council were communicated with, and a formal sample was taken from the manufacturers which proved to be genuine.

In the case of the informal samples of cornflour, bun flour, and milk, which were subsequently reported as non-genuine, formal samples were taken and proved genuine.

E.—CHEMICAL AND BACTERIOLOGICAL EXAMINATIONS.

Samples of milk and of other foods for chemical analysis are sent to the Laboratory of the Public Analysts at Moorgate Hall, London, E.C. Samples of milk for bacteriological examination are sent to the Pathological Department of the Southend General Hospital. Samples of shellfish are examined at the Bacteriological Laboratory at the Borough Sanatorium or on occasions at the Counties Public Health Laboratories, Queen Victoria Street, E.C.

F.—NUTRITION.

Apart from addresses to mothers who attend at the Infant Centres, no special steps have been taken to increase the knowledge of the public on the subject of nutrition.

G.—SHELLFISH (MOLLUSCAN).

The agreement under which a syndicate of four local shellfish merchants undertakes the collection of shellfish from the foreshore belonging to the Corporation and from the Shoeburyness foreshore, and takes steps to prevent the indiscriminate collection of shellfish by visitors and others, continues in force. The cockles and winkles collected are sterilized at the shellfish merchants' cockle-steaming sheds at Leigh-on-Sea, the relatively few oysters collected being sent to a recognized oyster-bed at Paglesham for relaying and purification. Any mussels collected from Chapman's Hard, Canvey Point, or the foreshore of the Borough, are sterilized by steaming at the cockle-sheds prior to sale to the public or to retailers.

SECTION F.

I.—INFECTIOUS DISEASES.

The numbers of cases of infectious diseases notified during the year are shown in the following table:—

Disease	Total cases notified	Cases admitted to Hospital	Total Deaths
Smallpox	—	—	—
Scarlet Fever	268	146	1
Diphtheria	85	85	4
Typhoid Fever	5	5	2 (a)
Paratyphoid B.	3	3	—
Puerperal Pyrexia	19	14	—
Pneumonia	187	54	76
Ophthalmia Neonatorum	7	4	—
Erysipelas	50	3	1
Cerebro-spinal Meningitis	3	3	1
Ac. Anterior Poliomyelitis	5	5	—
Bacillary Dysentery	14	4	—
Ac. Polio Encephalitis	4	4	1
Malaria	1	1	—

(a) One death of a resident also occurred outside the district.

There was no undue incidence of any of the notifiable infectious diseases, as will be seen from the following table which gives the rate per 1,000 population.

	Smallpox	Scarlet Fever	Diphtheria	Enteric Fever	Erysipelas	Pneumonia
Southend-on-Sea	—	1.94	0.62	0.05	0.36	1.35
England & Wales	0.00	2.41	1.58	0.03	0.40	1.10
London	—	2.05	1.90	0.05	0.46	0.98
125 large Towns	—	2.60	1.85	0.03	0.46	1.28
148 smaller Towns	0.00	2.58	1.53	0.04	0.39	0.98

Scarlet Fever.—The notifications numbered 268 as compared with 301 in 1937, and 424, 344, 507, 406 and 173 in the preceding five years. The outbreak of 10 cases which occurred in the last week in December, 1937, at a local Orphanage continued during the early months of the year, 18 cases being notified in January, 3 in March, 1 in April, and 3 in May. There were also a series

of cases at a Children's Holiday Home, three cases being notified in May and four in June, whilst six cases occurred among the pupils at a boys' boarding school in May. The cases admitted to Hospital numbered 146, all of whom recovered with the exception of a boy, aged 6, who died in March from uræmia due to scarlatinal nephritis.

Diphtheria.—Of this disease, 86 notifications were received as compared with 93 in 1937 and 54, 124, 157, 77, and 87 in the preceding five years. With the exception of one who left the town for an unknown address before receipt of the notification, all the patients were admitted to the Borough Sanatorium for treatment. Four of the patients died.

The Diphtheria Immunisation Clinic.—The clinic has now completed its third year of existence and was held weekly throughout 1938. Most of the children were brought to the clinic as a result of the advice given by the Health Visitors, both at their routine visits to children under 5 years of age and during the "talks" given at the Infant Welfare Centres. The antigen employed has again been T.A.F. and the only reactions noted were a transient erythema and some local tenderness at the site of injection which occurred in two sisters 24 hours after inoculation, but did not recur after subsequent injections. All children over the age of 10 were Schick tested prior to being treated and although the number so tested is small the results suggest that there is a low level of immunity even in the higher age groups in the Borough, for 27 Primary Tests provided 18 positive reactors, a percentage of 66. The figures for the year provide evidence that immunisation is becoming more popular, the number of individual children attending being 276, an increase of 105 as compared with the previous year. 138 posterior Schick tests were performed on children previously treated at the clinic, 6 positive and 121 negative readings being obtained, giving a negative rate of 95%. In addition 4 children who had been immunised elsewhere were Schick tested, all of them giving negative readings.

The particulars of attendances, etc., are given below as are the comparable figures for the previous year:—

	1937	1938
No. of individual children attending	171	276
Total No. of attendances	617	754
„ „ „ injections given	348	532
No. of Primary Schick tests :—		
Positive	48	18
Negative	6	9
No. of Posterior Schick tests :—		
Positive	6	6
Negative	*72	*124
No reading	—	11

* In each year 4 children had been immunised elsewhere.

Typhoid Fever.—Five cases came under notice during the year and were admitted to the Borough Sanatorium; of these, one was originally notified as Para Typhoid B, the subsequent course

of the disease and the Widal Reaction later leading to the amended diagnosis. One of the patients had been admitted to the local General Hospital from a neighbouring Sanitary District as a case of Pyrexia of unknown causation. One of the Borough cases was a ship's steward who became ill 9 days after his return from a Mediterranean cruise on a liner and whose illness terminated fatally; several cases of Typhoid Fever and of Para Typhoid B. appear to have been associated with the cruise, a fellow steward who returned ill to his home in this Borough having been previously admitted to the Borough Sanatorium as a case of Para Typhoid B. Two of the cases appear to have been associated with the eating of shellfish, the onset of the disease being 13 days and 14 days respectively after the consumption of oysters and cockles respectively; the oysters had been purchased at the shop of a local shellfish dealer who obtained his supplies from a well-known Oyster Company whose oyster beds are considered to be free from liability to sewage pollution; the cockles, on the other hand, had been collected by the patient from the Thames foreshore and had been boiled by his relatives for an insufficient time to allow for their sterilization. In the fifth case which had a fatal termination, the cause of infection was not ascertained, although there was reason to believe he had partaken at a London Restaurant of watercress about 14 days before the onset of his illness.

In addition to the two deaths above referred to, a ship's steward ordinarily resident in the Borough died at the Port of London Isolation Hospital from Typhoid Fever which he developed during a voyage on a liner, being admitted to hospital on arrival at Tilbury.

Para Typhoid B. Fever.—Five notifications of this disease were received during the year, but of these, two were subsequently withdrawn, the diseases proving to be Tuberculous Meningitis and Typhoid Fever respectively. One was a ship's steward who became ill in August whilst on a Mediterranean cruise and was admitted to hospital four days after arrival home and on the 17th day of the disease. In the two remaining cases which were notified in April and December respectively, the source of infection was not ascertained. The three patients were admitted to the Borough Sanatorium and all recovered.

Dysentery.—Fourteen notifications of Dysentery were received, two in January, two in March, four in April, two in September, one in October and three in November. Apart from two cases in each of five houses, the cases were not apparently associated. Except in five cases in which bacteriological examinations were made, the diagnosis was based on the clinical signs and symptoms. Four of the patients were treated at the Borough Sanatorium and all made a good recovery.

Puerperal Pyrexia.—Nineteen notifications of Puerperal Pyrexia were received during the year, the pyrexia following confinements, three of which took place in the Southend General

Hospital, three at a Maternity Home, one in each of two Nursing Homes, one in the Military Families Hospital, and the remaining ten in the patients' own homes, six of the latter being doctors' cases and four being attended by midwives. Twelve of the patients were admitted for treatment to the Municipal Hospital, these including two of the cases confined in the Maternity Home, and one of the cases delivered at a Nursing Home. In eight of the cases, instrumental delivery had been necessary and in two of the other cases lacerations had needed suturing; in the other cases the pyrexia was of short duration and did not appear to be associated with sepsis. All of the patients recovered.

Ophthalmia Neonatorum.—Seven infants were notified to be suffering from Ophthalmia; medical practitioners had been present at the births in three of the cases, the other four cases occurring in the practices of four midwives. The only severe case was admitted with the mother to the Borough Sanatorium for treatment, two other cases attending daily for outpatient treatment. All recovered without damage to vision.

Notified	Treated		Vision un-impaired	Vision impaired	Total blindness	Deaths
	At Home	In Hospital				
7	*5	2	7	—	—	—

* Two of these infants attended the Borough Sanatorium for nursing treatment as outpatients.

Cerebro-spinal Meningitis.—Three notifications were received during the year, patients aged 4 years, 4 months and 15 years respectively being notified in January, July and November respectively. All three were treated in hospital, the only fatality being the boy of 15 years who died 6 days after admission to the Borough Sanatorium in spite of treatment by serum and prontosil.

Acute Anterior Poliomyelitis.—Five notifications were received, *viz.*, three in August aged 7 months, 11 years, and 8 years respectively, one in September aged 8, and one in December aged 11. The three cases in August appear to have been associated with the outbreak of the disease in a village in North Essex, the primary case having, as is stated in the accompanying report of the Medical Superintendent of the Borough Sanatorium, become ill 10 days after returning home after staying for 18 days in a house next door to that at which cases of the disease had occurred and a suspected carrier was residing; the other two cases in August were cousins of the first patient and had been in contact with her and her mother during the days immediately preceding the onset of her illness.

The case which was notified in September developed the disease on the day following his arrival from an extra-metropolitan

Borough in Essex, but no association with recognized cases of the disease could be traced. The case notified in December was a boarder at a Private School and the origin of the infection could not be traced. All the patients were admitted to the Borough Sanatorium for treatment and recovered with only slight residual paralysis.

Polio-encephalitis.—Of the four cases notified, one a boy aged 8 became ill on August 28th, the day following his return home from a week's holiday in a town in South East Essex, being admitted to the Borough Sanatorium three days later. Two cases notified on September 15th were a brother and sister aged 13 and 11 respectively, the former of whom had become ill on August 18th being admitted to the local General Hospital on the second day of his illness, his sister being admitted on September 13th after an illness of 2 weeks duration characterised by intermittent headache; both children had a history pointing to cerebral irritation but neither developed any paresis and both recovered. The case notified in December was a girl of 12 who was admitted to the Borough Sanatorium on December 13th with a history of having been ill at home for 10 days; on admission she had paralysis of pharyngeal and facial muscles and developed within a few hours paralysis of the respiratory muscles, dying from heart failure early the next morning.

Encephalitis Lethargica.—No cases of this disease were notified, the three deaths recorded in the Registrar General's returns as being due to this disease being of patients who died from the after effects of attacks in past years.

II.—CANCER.

The number of deaths of residents which was attributed to Cancer and other Malignant Disease was 283 (Males 116, Females 167), giving a death rate per 1,000 of 2.04 as compared with 1.98, 1.86, 1.72, 1.93 and 1.65 in each of the preceding five years. The death rate for Cancer for the whole country was 1.63, the excess rate in the County Borough being doubtless explained by the proportion of the local population formed by the elderly.

The ages at death were as follows:—

	0-1	1-5	5-15	15-25	25-35	35-45	45-55	55-65	65-75	Over 75	TOTAL
Males	—	—	—	1	3	1	14	34	47	16	116
Females	—	—	—	—	3	4	25	45	47	43	167

The primary sites of the diseases were as follows:—

	Males.	Females.
Skin	1	1
Lips, cheek, floor of mouth, tongue, etc. ...	3	1
Tonsils, pharynx	6	2
Larynx, Bronchus, Lung, Mediastinum ...	19	10
Œsophagus	6	1
Stomach	27	27
Colon	7	27
Small intestine	—	2
Rectum	9	9
Gall bladder, liver	5	7
Pancreas	4	4
Ovary	—	8
Uterus	—	19
Breast	1	39
Prostate	12	—
Bladder	5	1
Brain	3	2
Miscellaneous or not ascertained	8	7
	116	167

The primary sites of the disease in the seven persons under 35 years whose deaths were attributed to Cancer were as follows:—

	Age
Males : Sarcoma of leg	18
Lympho-sarcoma	27
Malignant glioma	27
Carcinoma of cervical glands	31
Females : Cancer of colon	29
Cancer of breast	33
Cancer of uterus	34

The facilities available locally for diagnosis and treatment were set out in detail in the report for 1936 and remain unchanged.

III.—TUBERCULOSIS.

The following table gives particulars of all new cases of Tuberculosis, and of all deaths from the disease, during 1938:—

Age Periods	New Cases				Deaths			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M	F	M	F	M	F	M	F
0	—	—	—	—	—	—	—	—
1	—	—	1	—	—	—	1	—
5	1	1	3	6	1	—	—	1
15	11	21	1	1	2	4	—	1
25	12	27	5	3	15	12	—	—
35	17	11	—	1	9	4	—	—
45	15	9	—	—	6	3	1	1
55	8	3	1	—	8	1	—	—
65	2	1	—	—	2	2	1	—
and upwards								
Totals	66	73	11	11	43	26	3	3

The non-notified deaths numbered 6, or 7.5 per cent., five being ascertained from the Death Returns, whilst one was a post-humous notification. Enquiry is invariably made of medical practitioners as to the reason for failure to notify.

Notifications.—During the year 139 primary notifications of Pulmonary Tuberculosis (66 males and 73 females) were received, and 22 cases of Non-Pulmonary Tuberculosis (11 males and 11 females). There were also received 21 duplicate notifications, 1 of Non-Pulmonary and 20 of Pulmonary Tuberculosis.

The following table shows the Ward Incidence of the Primary cases notified during the year:—

Ward				Pulmonary	Non-Pulmonary	Totals
All Saints	...	...	...	12	2	14
Chalkwell	...	...	...	7	—	7
Eastwood	...	...	...	10	2	12
Leigh	...	...	...	14	5	19
Milton	...	...	...	7	1	8
Pier	...	...	...	11	1	12
Prittlewell	...	...	...	8	1	9
Shoebury	...	...	...	6	1	7
Southchurch	...	...	...	8	4	12
St. Clements	...	...	...	14	1	15
Thorpe	...	...	...	13	3	16
Victoria	...	...	...	19	1	20
Westborough	...	...	...	10	—	10
Totals	...	...	...	139	22	161

The number of cases of Tuberculosis remaining on the Notification Register on December 31st was as follows:—

Pulmonary			Non-Pulmonary			Grand Total
Males	Females	Total	Males	Females	Total	
236	235	471	40	39	79	550

The following Table shows the parts of the Body affected in the primary cases notified on Form A in 1938:—

Part of Body Affected	Males	Females	Total
Lungs	66	73	139
Cervical Glands	6	4	10
Meninges	—	1	1
Joints	1	—	1
Spine	2	—	2
Skin	1	2	3
Peritoneum and Abdominal Glands	—	3	3
Genito-Urinary	1	1	2
Totals	77	84	161

No action was necessary under the Public Health (Prevention of Tuberculosis) Regulations, 1925, or under Section 62 of the Public Health Act, 1925.

Institutional treatment was provided under the Council's Scheme for 214 patients, as under:—

Pulmonary	Adults		Children		Total
	M	F	M	F	
Municipal Hospital—Rochford and Leigh Wards... ..	45	45	—	—	90
Borough Sanatorium ("Allen" Block)	33	26	—	—	59
Benenden	16	16	—	—	32
Grosvenor	10	1	—	—	11
Preston Hall	4	—	—	—	4
Papworth	1	—	—	—	1
Guy's Hospital	—	1	—	—	1
National Children's Sanatorium, Harpenden	—	—	1	—	1
Daneswood	1	—	—	—	1
Tait Home, Broadstairs	—	1	—	—	1
London Chest Hospital	—	1	—	—	1
Totals	110	91	1	—	202

Non-Pulmonary	Adults		Children		Total
	M	F	M	F	
St. Vincent's, Pinner	—	—	1	2	3
St. Anthony's, Cheam	1	—	—	—	1
Royal Sea Bathing Hospital ...	1	3	—	—	4
Alton	—	—	1	2	3
Black Notley	—	—	1	—	1
Totals	2	3	3	4	12
Grand Totals	112	94	4	4	214

TABLE I.

Return showing the work of the Dispensary during the year 1938:—

Diagnosis	Pulmonary				Non-Pulmonary				Total				Grand Total
	Adults		Children		Adults		Children		Adults		Children		
	M	F	M	F	M	F	M	F	M	F	M	F	
A.—NEW CASES examined during the year (excluding contacts):—													
(a) Definitely tuberculous	41	49	—	1	4	3	5	4	45	52	5	5	107
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	—	1	1	—	2
(c) Non-tuberculous	—	—	—	—	—	—	—	—	39	40	21	14	114
B.—CONTACTS examined during the year:—													
(a) Definitely tuberculous	1	3	—	—	—	—	—	—	1	3	—	—	4
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	—	—	—	—	—
(c) Non-tuberculous	—	—	—	—	—	—	—	—	34	83	42	57	216
C.—CASES written off the Dispensary Register as:—													
(a) Recovered	5	5	1	—	—	2	6	5	5	7	7	5	24
(b) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous) ...	—	—	—	—	—	—	—	—	77	133	65	72	347
D.—NUMBER OF PERSONS on Dispensary Register on December 31st:—													
(a) Definitely tuberculous	207	184	1	7	10	7	17	24	217	191	18	31	457
(b) Diagnosis not completed	—	—	—	—	—	—	—	—	—	1	1	—	2

1. Number of persons on Dispensary Register on January 1st	494	tioners :— (a) Personal	65
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ...	50	(b) Otherwise	80
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of" ...	96	8. Number of visits by Tuberculosis Officer to Homes (including personal consultations) ...	543
4. Cases written off during the year as Dead (all causes)	61	9. Number of visits by Nurses or Health Visitors to Homes for Dispensary purposes ...	943
5. Number of attendances at the Dispensary (including Contacts)	1,778	10. Number of :— (a) Specimens of sputum, etc., examined ...	555
6. Number of Insured Persons under Domiciliary Treatment on the 31st December	72	(b) X-ray examinations made in connection with Dispensary work	1,200
7. Number of consultations with medical practi-		11. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above	—
		12. Number of "T.B. plus" cases on Dispensary Register on the 31st December	282

TABLE II.

The following Table shows the extent of Residential Treatment provided during the year 1938:—

	In Institutions on Jan. 1st	Admitted during the Year	Discharged during the Year	Died in the Institutions	In Institutions on Dec. 31st
PULMONARY					
M	36	75	66	23	22
F	17	73	53	15	22
Children	—	1	1	—	—
NON-PULMONARY					
M	2	—	1	—	1
F	2	1	2	—	1
Children	6	1	4	—	3
Total	63	151	127	38	49

TABLE IV.
(A) PULMONARY TUBERCULOSIS.

Annual Return showing in summary form the condition of all Patients whose case records are in the possession of the Dispensary at the end of 1938, arranged according to the years in which the Patients first came under Public Medical Treatment for Pulmonary Tuberculosis, and their classification as shown on Form A.

[illegible]

SECTION G.

CONTAGIOUS DISEASES (ANIMALS) ACTS.

The total number of inspections made during the year under the above Act was 81, and the following statement gives the particulars of the action under the Acts and Orders made by the Minister of Agriculture and Fisheries.

No cases of Foot and Mouth disease were reported during the year.

Swine Fever Order, 1938.—Three suspected cases of Swine Fever were notified during the year, but the existence of the disease was confirmed in only one case.

Parasitic Mange Order, 1938.—No cases of Parasitic Mange were reported during the year.

Tuberculosis Order 1925.—One cow was notified from a Dairy Farm in the Borough as suffering from chronic cough, diagnosed clinically to be due to Tuberculosis of the lungs. The animal, which was valued at £20, was slaughtered in accordance with the Order, and was found to be suffering from “Tuberculosis, not advanced.” The sum of £15 was paid in compensation to the owner of the animal, the net cost to the Corporation after allowing for salvage and the refund from the Ministry of Agriculture and Fisheries, being £7 12s. 0d.

Tuberculosis Order, 1938.—The new Order came into force on the 1st April, 1938, and revoked the Order of 1925 and its amending Orders. The new Order provides for the slaughter of affected cattle and for the payment of compensation therefor by the Minister of Agriculture and Fisheries instead of by the local authority as heretofore, and follows generally the lines of the 1925 Order with the necessary amendments consequential upon the transfer of the veterinary functions under the Agricultural Act of 1937. Local authorities, however, still retain with certain modifications their “lay” functions under the Order.

Since the new Order came into force, five notifications have been received of milch cows suspected to be suffering from Tuberculosis from three of the Dairy Farms in the County Borough. The animals were dealt with by the Veterinary Inspectors of the Ministry, being removed from the farms for slaughter, and upon post-mortem examination two were found to be affected with “Tuberculosis, not advanced,” and three with “advanced Tuberculosis.”

Sheep Double Dipping Order, 1920.—Three hundred and twenty-six sheep and lambs were double dipped during the year as required by the above Order.

Anthrax.—Two cases of Anthrax were notified during the year, the usual requirements of the Anthrax Order were carried out and the carcasses of the animals were disposed of by cremation

Rat and Mice Destruction Act, 1919.—Sixty complaints were received and dealt with during the year. During the official Rat Week the usual crusade was carried out and in addition to those destroyed by poison, some 617 rats were accounted for by the use of dogs, ferrets, traps, etc. Three hundred and twenty-three visits were made during the year in administering the Act.

Destructive Insects and Pests Acts.—No instances have been reported during the year of the presence of the Apple Capsid bug on apple trees in the Borough. Periodical spraying and pruning is now resorted to by the various smallholders and this would appear to be keeping the pest under control.

Two instances of the presence of the Woolly Aphis on apple trees in private gardens were reported; appropriate action was taken, the trees being sprayed and pruned and no further complaints were received.

SECTION H.

MENTAL DEFICIENCY ACTS.

At the end of the year there were 318 defectives on the register, of whom 162 were males and of whom 156 were females. This represents an increase of 7 compared with the previous year, the males shewing an increase of one and the females an increase of six.

Institutional Care.—On December 31st defectives were being maintained in Institutions as under:—

(a) By the Mental Deficiency Committee:

	Males	Females	Total
Royal Eastern Counties' Institution ...	30	26	56
Besford Court Certified Institution ..	3	—	3
Royal Earlswood Institution	4	3	7
Hortham Training Colony	—	7	7
St. Theresa's (Lewisham) Certified Institution	—	2	2
St. Joseph's Certified Instn. Sheffield	—	1	1
St. Raphael's Certified Institution, Barvin Park	1	—	1
Princess Christian Farm Colony (Hildenborough, Kent)	2	—	2
Stoke Park Colony	1	—	1
Home of the Good Shepherd	—	1	1
Southend Municipal Hospital	3	4	7
Rochford House, Public Assistance Institution	1	4	5
Total ...	45	48	93

			Males	Females	Total
(b)	By the State.				
	Rampton State Institution	... ..	2	—	2
(c)	By Relatives and Others.				
	Royal Eastern Counties' Institution	... ..	2	3	5
	Royal Earlswood Institution	... ..	1	—	1
	Mutual Sanatoria, Billericay	... ..	1	—	1

During the year institutional care was provided for two males, one at Stoke Park Colony and the other at the Mount Olivet Institution, Frensham, while financial responsibility was accepted for a patient already detained at the Royal Eastern Counties' Institution. A female patient was provided with institutional care at the Hortham Colony and a varying Order was obtained at the same time transferring her sister who was then at the Royal Eastern Counties' Institution to Hortham. Varying Orders were also obtained transferring two male defectives from other institutions to the Royal Eastern Counties' Institution. Four inmates of certified institutions, two males and two females, died during the year.

A male patient on licence from the Royal Eastern Counties' Institution was discharged from Order, and one male on licence was readmitted to the same Institution. A female on licence from the State Institution, Rampton, was discharged from Order.

Vacancies in Certified Institutions were again difficult to obtain and it is to be hoped that negotiations now in progress between the Council, the Essex County Council and the Committee of the Royal Eastern Counties' Institution, will result in the Corporation at last securing the additional beds so urgently needed. The total cost of institutional care of defectives during the year was £6,397.

Guardianship.—Two males and three females were under guardianship during the year. The Committee contribute to the support of each of them, and expended the sum of £94 in maintenance grants.

Supervision.—On January 1st, 1939, there were 68 males and 52 females under Statutory Supervision, the total being the same as the previous year. There were also 75 defectives, 35 males and 40 females, under voluntary supervision. A female in respect of whom a petition was dismissed in 1937 on the ground that the parental care appeared adequate to safeguard her from moral danger, gave birth to her second illegitimate child in December 1938. The Officers of the Committee made 1,156 visits to defectives.

SECTION I.

BLIND PERSONS ACT, 1920.

Register of Blind Persons.—The following table shows the number of blind persons on the Register at the beginning and at the end of the year respectively:—

	<u>REGISTER A.</u> Persons living in the County Borough			<u>REGISTER B.</u> Ordinarily Resident in Borough but temporarily in Institutions and Homes Outside			<u>TOTAL</u> on Reg- isters A. & B.
	M.	F.	Total	M.	F.	Total	
Number on Register on 1st January, 1938	94	107	201	3	7	10	211
Number no longer Blind ...	—	—	—	—	—	—	—
Died during the year ...	7	7	14	—	—	—	14
Left the Borough during the year	10	7	17	—	—	—	17
Transferred to "B" Register	—	1	1	—	—	—	1
Transferred from "A" Register	—	—	—	—	1	1	1
Newly Registered during the year	13	18	31	—	—	—	31
Removed from other areas...	6	8	14	—	—	—	14
Number on Register on 31st December, 1938 ...	96	118	214	3	8	11	225

Register C.—Temporarily resident in a Blind Home in the County Borough, although ordinarily resident in other areas:—

Number on Register on 1st January, 1938	40
Died during the year	—
Left Borough	1
Removed from other areas	6
On Register on 31st December, 1938	45

Home Visitor.—The number of visits paid during the year was 1,455. The number of lessons given was 93, all in embossed type, of which 42 were Braille lessons to four blind persons and 51 were Moon type lessons to five blind persons.

Technical Training.—One male blind person continued to receive training in basket making at the Royal School for the Blind at Swiss Cottage, and one female blind person completed her training in circular machine knitting at the end of the year and was certified as an Approved Home Worker as from 1st January, 1939.

Home Workers.— The number of approved Home Workers at the end of the year was eight. Three were engaged in hand-knitting, two in chair-caning, one in boot-repairing, one in basket-making, and one in piano-tuning.

Institutional Care.—Three aged blind persons, one male and two females, are being maintained in Homes for the Blind, and one male and one female are being maintained at the Rochford Poor Law Institution.

Tram Passes.—The number of blind persons at the end of the year who held tram passes issued by the Transport Committee on the recommendation of the Statutory Committee was 12.

Chair Passes.—One hundred and seventeen passes were issued to blind persons giving them free use of the deck chairs on the Cliffs and Promenades during the season, except in the months of July and August.

Periodicals.—Magazines and periodicals in braille and moon type were supplied to 28 readers during the year at the expense of the Statutory Committee.

Library.—At the end of the year there were 37 blind readers of books obtained from the National Library for the Blind, 33 receiving books direct and four receiving books through the Corporation's Public Library.

Wireless.—During the year 21 Certificates of Blindness were issued under the Wireless Telegraphy (Blind Persons Facilities) Act, 1926. The British "Wireless for the Blind" Fund allocated during the year 14 wireless sets for the use of local blind persons, these being all-mains loud-speaker sets. The Southend and District Radio Society continue to supervise the wireless sets of blind persons and paid 74 visits during the year. Twelve sets were installed by the Radio Society and the local branch of Toc H. assisted by installing a further six sets. This service is of inestimable value to the blind and is much appreciated both by the blind people and those responsible for their welfare.

Maintenance of Unemployable Blind.—The Blind Persons Act of 1938 necessitated a number of changes in the procedure for dealing with necessitous blind persons. The age at which a blind person becomes entitled to the Old Age Pension was decreased from 50 to 40, whilst it became the duty of the Council under the Act to provide maintenance not only for all unemployable and other necessitous blind persons, but also for their dependants. Prior to the coming into force of the Act, a number of blind persons had, for various reasons, not been paid domiciliary allowances by the Blind Persons Act Committee, but were in receipt of outdoor relief from the Public Assistance Committee, the amounts paid in some cases by the latter Committee being recoverable from other local authorities under the Poor Law Act; in a few instances it was deemed advisable to leave the provision of all necessary assistance to the Public Assistance Committee, for if the maximum grant allowable under the Council's scheme were paid to the blind person, it would still have been necessary for his dependants to seek Poor

Law relief. The increased expenditure involved in the taking over from the Public Assistance Committee of the maintenance of blind persons and their dependants was to some extent offset by the increase in the income of blind persons who immediately became entitled to the Old Age Pension. On the coming into force of the Act, the Council decided to pay direct allowances which had formerly been paid from the Voluntary Fund, to which an annual grant for the purpose had been made by the Council, and this decision became operative on the 5th June.

During the period 1st January to the 4th June, maintenance allowances totalling £1,126 13s. 5d. were paid from the Voluntary Fund, whilst from the 5th June to the 31st December, the allowances paid direct by the Council amounted to £1,967 1s. 11d., a total of £3,093 15s. 4d., as compared with £2,113 18s. 0d. for the year 1937. In addition, special Christmas Grants amounting to £28 12s. 6d. were paid on the basis of 5s. 0d. for each blind person, 2s. 6d. for the wife of a blind person and 1s. 6d. for each child of a blind person under the age of 16.

The number of blind persons in receipt of allowances were 76, 90, 100 and 98 in each of the four quarters respectively.

During nine months 1st April to 31st December the sum of £190 3s. 7d. was reclaimed from and £52 2s. 4d. was refunded to other Local Authorities pursuant to Section 3 of the Act of 1938.

Voluntary Fund.—This fund which is utilized in organizing entertainments for the blind, the annual Summer Outing, and making grants for various purposes, such as surgical appliances, maintenance of wireless sets, etc., was augmented by £95 5s. 11d. being the proceeds of various entertainments held in aid of the Fund, donations, grants, etc. The first of the following statements of receipts and expenditure is for the period 1st January, 1938 to 10th June, 1938, and the second from the 11th June, 1938, to the 31st March, 1939.

Period 1-1-38—10-6-38.

RECEIPTS.

		£	s.	d.
<i>Maintenance Section.</i>				
Balance in hand on 1st January, 1938	... ..	40	3	11
Grants from Town Council	... ..	1,100	0	0
Payments by relatives of Blind Persons	... ..	8	6	0
		1,148	9	11
<i>General Section.</i>				
Balance in hand on 1st January, 1938	... ..	218	10	0½
Grants—S.E. & L.C.A.B	... ..	5	15	0
<i>Donations—</i>				
Proceeds of Dancing Display and Rummage Sale		33	1	10
Mrs. Page	... ..	3	0	0
Miss Eagan	... ..	10	0	
Mrs. Noyall	... ..	7	0	
		1,409	13	9½

PAYMENTS.

		£	s.	d.
<i>Maintenance Section.</i>				
Weekly allowances to Blind persons up to 4th June, 1938	...	1,126	13	5
Proportion of Fidelity Guarantees	...	1	5	10
Balance in hand on 10th June, 1938 :—				
Cash at Bank	...	20	4	11
Cash in hands of Treasurer	...		5	9
		1,148	9	11
<i>General Section.</i>				
Grants to Blind Persons	...	11	17	0
Grants to Southend Radio Society for maintenance of Wireless Sets	...	7	0	0
Expenses of Socials	...	9	16	5
Proportion of Fidelity Guarantees	...	1	0	
Cheque Book	...	10	0	
Balance in hand on 10th June, 1938 :—				
Cash at Bank	...	231	12	3
Cash in hands of Hon. Treasurer	...		7	2½
		1,409	13	9½

PERIOD: 11-6-38 — 31-3-39.

RECEIPTS.

		£	s.	d.
Balance in hand on 11th June, 1938	...	252	10	1½
<i>Donations—</i>				
Proceeds of Concert, etc., per Miss Rengert	...	18	17	6
Proceeds of Band Performances—Westcliff Mission				
Silver Band	...	10	13	3
Daily Mail Treasure Hunt	...	5	5	0
Southend Rotary Club	...	5	0	0
George Talbot, Esq.	...	2	0	0
Mrs. R. A. Lacey	...	2	0	0
Mrs. Bonella	...	1	12	0
Mrs. Elkins	...	1	1	0
H. W. R. Flint, Esq.—Collecting Box	...	18	10	
Southend Amateur Angling Society	...	15	11	
Mr. Councillor Bray	...	10	0	
Mr. Councillor Cause	...	10	0	
Mr. Councillor Fowler, J.P.	...	10	0	
Mr. Councillor Tunnicliffe	...	5	0	
<i>Grants—</i>				
Southern Regional Association for the Blind	...	2	13	7
		305	2	2½

PAYMENTS.

		£	s.	d.
Expenses of Summer Outing	...	55	12	6
Refund to Town Council	...	20	10	8
Expenses of Socials	...	19	14	9½
Grants to Blind Persons	...	14	13	0
Special Grants for Christmas	...	8	5	0
Maintenance of Wireless Sets	...	5	5	0
Expenses of Band Performances	...	1	18	6
Fares of Blind Persons attending Socials	...	12	10	
Fidelity Guarantees	...	2	4	
Balance in hand on 31st March, 1939 :—				
Cash at Bank	...	177	8	3
Cash in hands of Hon. Treasurer	...		19	4
		305	2	2½

SECTION J.

MISCELLANEOUS APPENDICES.

Births Registered in the County Borough in 1938.

Ward				Legitimate.	Illegitimate.	Total.
Chalkwell	..	...	...	66	1	67
Westborough	...	...	...	76	3	79
Victoria	...	...	...	35	1	36
Milton	...	...	...	68	3	71
Prittlewell	...	...	...	65	4	69
Pier	...	...	...	41	4	45
Southchurch	...	...	...	151	7	158
Thorpe	...	...	...	76	4	80
Leigh	...	...	...	81	1	82
St. Clements	...	...	...	55	2	57
All Saints	..	...	...	70	7	77
Eastwood	...	...	...	405	16	421
Shoeburyness	...	...	...	98	2	100
Totals				1,287	55	1,342

No. of Births of boys registered	...	...	692
No. of Births of girls registered	...	...	650—1342

Infants born in the Borough to non-residents:—

Males, 85. Females, 77. Total, 162.

Illegitimate Infants:—

	Males.	Females	Total.
Born in Borough to residents	24	18	42
Born in Borough to non-residents	4	9	13

Notification of Births Act, 1921.—There were received during during the year, 1,340 notifications and 60 duplicate notifications of births in the Borough, 48 being of still births. Eight hundred and fifty-nine notifications were sent by doctors, 444 by midwives, and 22 by midwives but a doctor also being in attendance, and 15 by parents or other persons; in the latter cases a medical man was in attendance.

No notification was received in 38 cases which were attended by doctors. Failure to comply with the Act occurred in 2.75% of the births, as compared with 2.46% in 1937.

Ten cases were afterwards notified.

Maternity and Child Welfare Scheme.

Milk for Mothers and Children.—The following table shows the quantity of fresh and dried milk ordered each month of the year:—

			Fresh Milk				Dried Milk			
			Quantity	Cost			Quantity	Cost		
			Pints	£	s.	d.	lbs.	£	s.	d.
January	...	...	14,352	198	16	9	302	21	7	10
February	...	...	13,609	188	10	10	267	18	18	3
March	...	...	14,324	198	9	0	238	16	17	2
April	...	...	14,600	202	5	5	241	17	5	5
May	...	...	12,978	179	16	0	233	16	13	4
June	...	...	11,588	160	10	11	225	16	4	0
July	...	...	12,334	170	17	7	209	15	0	6
August	...	...	11,079	153	9	10	179	12	18	4
September	...	...	12,217	169	5	1	193	13	17	8
October	...	...	15,062	208	13	5	228	16	7	7
November	...	...	16,935	234	12	5	322	22	18	1
December	...	...	19,358	278	4	9	304	21	14	7
Total for 1938	...	...	168,436	2,343	12	0	2,941	210	2	9
1937	...	...	103,431	1,243	15	4	2,985	211	13	3
1936	...	...	78,319	907	17	1	2,401	170	1	5
1935	...	...	57,623	694	0	3	1,869	132	10	7
1934	...	...	52,111	661	19	1¼	1,676	118	14	7
1933	...	...	47,111	586	3	8	1,653	117	1	9
1932	...	...	28,606	385	9	0	1,725	122	3	9
1931	...	...	15,385	205	4	4¼	770	57	5	0
1930	...	...	7,278	99	7	7½	566	42	10	6
1929	...	...	3,301	46	6	6	394	29	11	0
1928	...	...	7,249	101	10	1	261	19	13	0
1927	...	...	10,255	139	10	5½	408	30	12	0
1926	...	...	10,235	128	13	3	307	23	0	0
1925	...	...	16,055	240	13	2½	408	30	12	6
1924	...	...	29,893½	411	15	2	1,331	99	16	6

Meals for Expectant Mothers and for Young Children in Necessitous Cases.—Two expectant mothers were provided with meals during 1938.

Dental Treatment is provided for expectant mothers and young children at the School Dental Clinic by arrangement with the Education Committee, 103 attendances being made by 57 expectant mothers, the treatment afforded being 154 extractions, 31 fillings, 4 dressings, and 4 scalings. Dentures are not provided, but necessitous mothers are assisted out of the Voluntary Fund to obtain them at reduced fees from private dental surgeons. The young children under 5 years of age who received dental treatment at the School Clinic numbered 161, the total extractions numbering 251, fillings 84 and dressings 6.

Tonsils and Adenoids.—Seventy-four children under 5 received operative treatment by arrangement with the Education Committee, 36 receiving free treatment, 18 contributing £17 18s. 3d. towards the cost, whilst in 18 cases the Hospital Provident Fund made a grant of 10/-, and in 2 cases the L.M. & S. Railway Hospital Fund made a grant of 10s. 6d.

Treatment of Squint.—Forty-five young children attended at the Education Committee's Eye Clinic for refraction by the Specialist Ophthalmic Surgeon, and appropriate spectacles were prescribed and obtained at the cost of the parents.

Orthopædic Treatment.—Thirty-seven children under five years of age received treatment under the Education Committee's scheme, two receiving in-patient treatment; there were 51 attendances at the quarterly Clinics, 50 at intermediate Clinics, 12 for massage, etc., and one for X-ray examination; the total cost was £25 13s. 7d., apart from the provision of surgical boots, etc.

Deaths in Institutions in 1938.

Of the 1,201 deaths which were registered as having occurred in the Borough, 267, or 22.2 per cent., occurred in Public Institutions, 222 taking place in the Southend General Hospital, 33 in the Borough Sanatorium, 10 in Nazareth House and 2 in the Shoeburyness Military Families Hospital. The corresponding percentages in the five previous years were 20.8, 19.6, 22.7, 22.5 and 10.7 respectively.

Of the 1,724 deaths of residents of the Borough, 800 or 46.4 per cent. took place in Public Institutions either in the Borough or elsewhere, as under:—

Public Institutions in the Borough:—

Southend General Hospital	...	...	...	...	145
Borough Sanatorium	...	..	...	...	33
Nazareth House	...	...	...	...	10
Military Families Hospital	...	...	...	...	2
					190

Public Institutions outside the Borough:—

Southend Municipal Hospital	...	...	...	...	540
Rochford House	...	...	...	...	3
Mental Hospitals	...	...	...	...	32
London Hospitals	...	...	...	...	28
Other Hospitals	...	...	...	...	6
Tuberculosis Sanatoria	...	...	...	...	1
					610

The percentage 46.4 compared with 40.7, 44.5, 42.5, 45.9, 44.8, 39.6, and 37.7 respectively in the seven previous years.

The number of deaths in Nursing Homes in the Borough was 66, eleven of which were of persons not resident in the area.

Inquests.—Inquests were held by the Coroner for the Borough as to deaths of 56 persons whose deaths were registered in the Borough during the year, a percentage of 4.6 of the 1,201 deaths, as compared with a percentage of 4.8 in the previous year.

Murder:—

By strangulation	...	...	...	...	...	...	1
------------------	-----	-----	-----	-----	-----	-----	---

Suicides:—

Under train	...	...	...	...	...	...	1
Coal-gas poisoning	...	...	...	...	...	...	10
Hanging	...	...	...	...	...	...	3
Drowning	...	...	...	...	...	...	4
By cut throat	...	...	...	...	...	...	2
Poisoning by Lysol	...	...	...	...	...	...	2
Hydrochloric Acid	...	...	...	...	...	...	1
Ammonia	...	...	...	...	...	...	1
Luminal	...	...	...	...	...	...	1
							25

Accidents:—

Strangulation by braces	...	...	...	...	...	...	1
Carbon-monoxide poisoning	...	...	...	...	...	...	1
Buried by fall of earth	...	...	...	...	...	...	1
Falls	...	...	...	...	...	...	1
Drowning	...	...	...	...	...	...	2
Fall from pedal cycle	...	...	...	...	...	...	1
Knocked down by pedal cycle	...	...	...	...	...	...	2
Collision of pedal cycle with motor vehicle	...	...	...	...	...	...	1
Collision of motor cycle with motor vehicle	...	...	...	...	...	...	5
Knocked down by motor vehicle	...	...	...	...	...	...	8
Scalds	...	...	...	...	...	...	1
Burns	...	...	...	...	...	...	1
							25

Open Verdicts:—

Coal-gas poisoning	...	...	...	...	...	...	1
Drowning	...	...	...	...	...	...	3
Toxic Jaundice	...	...	...	...	...	...	1
							5

56

Deaths Certified by Coroner.—In 71 cases (or 5.9 per cent.) in which the cause of death was not certified by a medical practitioner, the deaths were registered on the Coroner's Certificates, after Post-mortem examinations but without inquests being held, pursuant to the Coroner's (Amendment) Act, 1926; this compares with 5.2 in 1937 and 6.3, 3.4, 3.3, 2.8 and 2.1 per cent. in each of the previous five years.

Uncertified Deaths.—Of the 1,201 deaths in the Borough, 50 were uncertified either by medical practitioners or by the Coroner with or without inquest, a percentage of 4.1 as compared with 3.1 in the previous year.

The causes to which the deaths were attributed were as follows:—

Diseases.	No. of deaths.
Heart Failure, Heart Disease, etc.	21
Angina Pectoris, Coronary Thrombosis	12
Arterio-Sclerosis	2
Epileptic convulsions	1
Cerebral Hæmorrhage	3
Senility	1
Chronic Bronchitis	4
Pulmonary Tuberculosis	3
Gastritis	1
Diabetes, Heart failure	1
Death under Anæsthetic	1
	50

Ministry of Health Tables.
TABLE I.
Vital Statistics of Whole District during 1938 and previous years.

	Population estimated to middle of each year.	BIRTHS.			Total Deaths registered in the District.		Transferable Deaths.		Net Deaths belonging to the District.			
		Uncorrected Number.	Net. Number.	Rates.	Number.	Rates.	Of Non-residents registered in the district.	Of residents not registered in the district.	Under 1 year.		At all ages.	
									Number.	Rate per 1,000 Net Births.		Number.	Rates.
1928	111200	1415	1505	13.5	965	8.7	69	327	67	44	1224	11.0
1929	114600	1304	1391	12.1	1134	9.9	86	418	90	64	1466	12.7
1930	114600	1335	1477	12.9	923	8.1	82	376	60	41	1217	10.6
1931	118400	1210	1374	11.6	1084	9.1	94	483	66	48	1473	12.4
1932	120400	1159	1358	11.2	1052	8.7	85	555	73	54	1524	12.6
1933	132374	1132	1347	10.8	1139	9.1	124	544	57	42	1559	12.5
1934	133400	1323	1502	11.3	1176	8.8	122	597	73	48	1651	12.4
1935	134900	1338	1499	11.1	1201	8.9	118	547	61	41	1630	12.1
1936	136100	1382	1548	11.4	1154	8.4	133	568	70	45	1589	11.6
1937	137400	1407	1554	11.3	1235	8.9	121	711	72	46	1825	13.3
1938	138100	1342	1498	10.84	1201	8.7	129	652	51	34	1724	12.48

Area of District in acres
land and inland water

10,333.

Total Population at all ages, at Census 1931—120,093.

TABLE. II. Cases of Infectious Disease Notified during the year 1938.

Notifiable Disease	No. of cases notified												Total cases notified in each Ward												Total Cases Re-moved to Hospital		
	At all ages	Under 1 year	1 to 2	2 to 3	3 to 4	4 to 5	5 to 10	10 to 15	15 to 20	20 to 35	35 to 45	45 to 65	65 & upwards	Chalkwell	Westborough	Milton	Victoria	Pier	Prittlewell	Southchurch	Thorpe	Leigh	St. Clements	Shoeburyness		Eastwood	All Saints
Smallpox ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera, Plague	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria—	86	—	2	2	3	7	39	19	5	7	1	1	—	2	13	3	11	11	11	4	8	8	—	13	7	6	85
(including Mem-branous Croup)	50	1	—	—	—	—	—	—	2	9	7	25	6	1	3	4	2	5	2	2	5	4	3	1	6	7	1
Erysipelas ...	268	—	5	11	15	14	128	62	17	12	4	—	—	7	22	11	43	16	10	26	26	13	14	34	29	17	146
Scarlet Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhus Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric Fevers:	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Typhoid ...	5	—	—	—	—	—	—	—	1	2	1	1	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—
Paratyphoid	3	—	—	—	—	—	—	—	1	1	—	1	—	—	—	—	—	—	1	—	—	—	1	—	1	1	5
Relapsing Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3
Puerperal Pyrexia	19	—	—	—	—	—	—	—	3	15	1	—	—	1	—	—	2	—	1	6	1	1	—	1	3	3	14
Cerebro-spinal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	3
Meningitis ...	3	1	—	—	—	1	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—
Ac. Anterior	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Polio-myelitis	5	1	—	—	—	—	3	1	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	4	—	5
Ophthalmia	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Neonatorum	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	2	1	—	—	—	—	—	1	4
Pneumonia ...	187	19	8	10	9	6	21	9	7	16	15	36	31	10	15	9	9	6	8	16	10	14	11	3	63	13	54
Trench Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1
Dysentery	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis	14	—	—	—	—	—	5	1	1	2	3	2	—	—	—	—	2	2	1	2	1	—	—	—	5	1	4
Lethargica ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute Polio	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Encephalitis	4	—	—	—	—	—	1	3	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	3	—	4

TABLE III.
Causes of and Ages at Death during the year 1938.

CAUSES OF DEATH	Net Deaths at the subjoined ages of "Residents" whether occurring within or without the district											
	All ages	0-1	1-2	2-5	5-15	15-25	25-35	35-45	45-55	55-65	65-75	75 & upwards
Enteric Fever ...	3	—	—	—	—	—	2	—	—	1	—	—
Smallpox ...	—	—	—	—	—	—	—	—	—	—	—	—
Measles ...	4	—	1	2	1	—	—	—	—	—	—	—
Scarlet Fever ...	1	—	—	—	1	—	—	—	—	—	—	—
Whooping Cough ...	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria ...	4	—	—	1	3	—	—	—	—	—	—	—
Influenza ...	10	—	1	—	—	—	1	1	2	3	2	—
Encephalitis Lethargica ...	3	—	—	—	—	—	—	—	1	1	1	—
Cerebro-spinal Fever	1	—	—	—	—	1	—	—	—	—	—	—
Tuberculosis of respiratory system	69	—	—	—	1	6	27	13	9	9	2	2
Other Tuberculous Diseases ...	6	—	1	—	1	1	—	—	1	1	1	—
Syphilis ...	5	—	—	—	—	—	—	—	2	3	—	—
General paralysis of the insane, tabes dorsalis ...	5	—	—	—	—	—	—	1	1	1	2	—
Cancer, malignant disease ...	283	—	—	—	—	1	6	5	39	79	94	59
Diabetes ...	25	—	—	—	—	—	—	1	3	4	13	4
Cerebral Haemorrhage, etc. ...	144	—	—	—	—	—	1	3	9	28	49	54
Heart Disease ...	505	—	—	—	2	2	4	4	33	64	141	255
Aneurysm ...	10	—	—	—	—	—	—	1	1	5	3	—
Other circulatory diseases ...	105	—	—	—	—	—	—	—	5	14	36	50
Bronchitis ...	24	—	—	—	—	—	—	—	1	2	8	13
Pneumonia (all forms)	76	9	—	2	1	3	1	2	8	9	21	20
Other respiratory diseases ...	17	—	—	—	1	—	2	1	4	2	4	3
Peptic Ulcer ...	15	—	—	—	—	—	—	—	6	4	4	1
Diarrhoea, etc. ...	13	7	1	1	—	1	—	—	1	—	2	—
Appendicitis ...	13	—	—	1	1	1	—	2	—	2	5	1
Cirrhosis of Liver ...	6	—	—	—	—	—	—	1	—	—	5	—
Other diseases of Liver, etc. ...	12	—	—	—	1	1	1	—	—	1	4	4
Other digestive diseases ...	37	—	2	1	1	2	—	2	4	7	10	8
Acute and chronic Nephritis ...	51	—	—	—	—	2	1	4	8	8	13	15
Puerperal Sepsis ...	—	—	—	—	—	—	—	—	—	—	—	—
Other puerperal causes	4	—	—	—	—	—	1	2	1	—	—	—
Congenital debility, premature birth, malformation, etc.	30	29	—	—	—	—	1	—	—	—	—	—
Senility ...	31	—	—	—	—	—	—	—	—	—	2	29
Suicide ...	21	—	—	—	—	—	2	6	4	7	1	1
Other violence ...	41	2	1	1	1	3	5	5	2	7	4	10
Other defined diseases	146	4	1	—	6	5	8	7	19	25	31	40
Causes ill-defined or unknown ...	4	—	—	—	—	—	—	—	2	—	1	1
Totals ...	1724	51	8	9	21	29	63	61	166	287	459	570

TABLE IV.

Net deaths from Stated Causes at various ages under One Year of age.

CAUSES OF DEATH				Under 1 Week	1-2 Weeks	2-3 Weeks	3-4 Weeks	Total under 4 Weeks	4 Weeks and under 3 Months	3-6 Months	6-9 Months	9-12 Months	Total Deaths under 1 Year
All causes	Certified ...	...	...	23	1	4	1	29	3	7	4	5	48
	Uncertified ...	...	...	—	—	—	—	—	—	—	—	—	—
	Inquest ...	...	...	—	—	—	—	—	—	—	—	—	—
	After P.M. without Inquest ...	...	...	1	1	—	—	2	1	—	—	—	3
Small-pox	...	...	...	—	—	—	—	—	—	—	—	—	—
Chicken-pox	...	...	...	—	—	—	—	—	—	—	—	—	—
Measles	...	...	...	—	—	—	—	—	—	—	—	—	—
German Measles	...	...	...	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	...	...	...	—	—	—	—	—	—	—	—	—	—
Whooping Cough	...	...	...	—	—	—	—	—	—	—	—	—	—
Diphtheria and Croup	...	...	...	—	—	—	—	—	—	—	—	—	—
Influenza	...	...	...	—	—	—	—	—	—	—	—	—	—
Erysipelas	...	...	...	—	—	—	—	—	—	—	—	—	—
Meningococcal Meningitis	...	...	...	—	—	—	—	—	—	—	—	—	—
Meningitis	...	...	...	—	—	—	—	—	1	—	—	—	1
Tuberculous Meningitis	...	...	...	—	—	—	—	—	—	—	—	—	—
Abdominal Tuberculosis	...	...	...	—	—	—	—	—	—	—	—	—	—
Convulsions	...	...	...	—	—	—	—	—	—	—	—	—	—
Laryngitis	...	...	...	—	—	—	—	—	—	—	—	—	—
Bronchitis	...	...	...	—	—	—	—	—	—	—	—	—	—
Pneumonia (all forms)	...	...	...	1	—	1	—	2	1	4	—	2	9
Diarrhoea and Enteritis	...	...	...	—	1	—	—	1	—	1	3	2	7
Gastritis	...	...	...	—	—	—	—	—	—	—	—	—	—
Syphilis	...	...	...	—	—	—	—	—	—	—	—	—	—
Injury at Birth	...	...	...	4	—	—	—	4	—	—	—	—	4
Suffocation, Accidental	...	...	...	—	—	—	—	—	—	—	—	—	—
Inattention at Birth	...	...	...	—	—	—	—	—	—	—	—	—	—
Atelectasis	...	...	...	2	—	—	—	2	—	—	—	—	2
Congenital Malformation	...	...	...	8	1	1	—	10	—	—	—	—	10
Premature Birth	...	...	...	8	—	2	1	11	—	—	—	—	11
Atrophy, Debility and Marasmus	...	...	...	—	—	—	—	—	—	—	—	—	—
Icterus Neonatorum	...	...	...	1	—	—	—	1	—	—	—	—	1
Perpura Haemorrhaeica	...	...	...	—	—	—	—	—	—	—	—	1	1
Scalds	...	...	...	—	—	—	—	—	—	—	1	—	1
Septicaemia	...	...	...	—	—	—	—	—	1	2	—	—	3
Asphyxia during vomiting	...	...	...	—	—	—	—	—	1	—	—	—	1
Totals				24	2	4	1	31	4	7	4	5	51

Net Births in the Year	Legitimate	...	...	1,411
	Illegitimate	...	...	87
Net Deaths in the Year	Legitimate	...	...	48
	Illegitimate	...	...	3

Meteorological Tables.

MAXIMUM THERMOMETER, 1938.

Month	Mean Deg.	Highest Deg.	Date	Lowest Deg.	Date
January ...	47.0	55	24th	36	3rd
February ...	46.0	55	26th	36	14th
March ...	58.1	68	30th	47	23rd
April ...	57.0	65	7th	47	9th
May ...	58.8	72	14th	48	2nd
June ...	70.7	80	21st	59	2nd
July ...	71.2	85	31st	60	8th
August ...	71.3	82	6th & 12th	62	29th
September ...	68.2	82	12th & 13th	61	6th
October ...	59.3	66	17th	50	27th
November ...	54.6	67	5th	46	29th
December	44.0	55	12th	25	20th

MINIMUM THERMOMETER, 1938.

Month	Mean Deg.	Highest Deg.	Date	Lowest Deg.	Date
January ...	37.9	44	24th	32	4th & 11th
February ...	36.5	43	26th & 28th	30	14th
March ...	40.9	48	17th & 30th	32	8th
April ...	38.9	45	25th	31	18th
May ...	45.2	54	15th	34	8th
June ...	53.6	63	24th	45	13th
July ...	55.0	61	26th & 31st	48	2nd
August ...	56.8	65	1st	53	18th
September ...	53.4	62	24th	45	3rd
October ...	46.6	53	1st, 4th & 8th	33	25th
November ...	45.9	56	5th	36	27th
December ...	36.1	48	12th & 14th	20	21st

RAINFALL, 1938.

Month				Total Rainfall Inches	Quarterly Rainfall	Highest Rainfall in 24 hours Inches	Date
January	...	...	...	2.15		0.30	13th
February	...	...	...	0.70		0.22	15th
March	...	...	...	0.37	3.22	0.18	25th
April	...	...	...	0.28		0.09	2nd & 30th
May	...	...	...	2.17		0.56	17th
June	...	...	...	0.52	2.97	0.32	1st
July	...	...	...	0.21		0.41	5th
August	...	...	...	2.02		0.66	7th
September	...	...	...	1.30	3.53	0.31	27th
October	...	...	...	1.71		0.31	15th
November	...	...	...	1.23		0.28	20th
December	...	...	...	2.74	5.68	0.31	21st & 24th

WIND, 1938.

Month	N.	N.N.E.	N.E.	E.N.E.	E.	E.S.E.	S.E.	S.S.E.	S.	S.S.W.	S.W.	W.S.W.	W.	W.N.W.	N.W.	N.N.W.
January ...	1	—	2	1	—	—	—	—	—	1	15	1	6	—	4	—
February ...	1	5	4	1	—	1	2	—	2	—	3	3	3	1	1	1
March ...	1	2	1	2	—	—	—	1	1	2	7	4	7	—	3	—
April ...	10	5	4	—	—	—	—	—	—	—	2	—	2	2	1	4
May ...	2	—	5	1	—	2	3	—	2	3	4	3	2	—	1	3
June ...	—	—	—	—	—	2	—	—	1	2	13	5	—	—	6	—
July ...	—	—	—	1	1	—	—	2	1	3	13	2	3	1	4	—
August ...	1	—	4	—	—	—	4	—	—	—	8	1	—	1	6	2
September ...	—	3	—	—	—	—	4	—	4	4	3	1	3	1	4	1
October ...	—	—	—	—	—	—	4	—	1	2	13	1	3	—	2	2
November ...	—	—	—	—	—	1	1	2	3	3	11	4	2	—	—	—
December ...	2	—	3	—	1	—	3	2	7	—	6	—	4	—	2	1

TABLE SHOWING NUMBER OF HOURS OF SUNSHINE
IN EACH MONTH DURING THE LAST TEN YEARS.

Month	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938
January ...	39.24	44.42	58.0	52.9	35.2	54.0	66.1	39.3	49.6	48.0
February ...	69.12	69.54	67.1	79.1	91.6	83.9	57.3	94.5	76.2	80.9
March ...	168.48	136.18	164.2	144.7	186.7	131.1	115.4	101.1	129.8	178.1
April ...	172.18	124.54	122.3	148.3	153.3	128.9	148.5	146.2	93.3	156.6
May ...	267.18	188.12	192.3	143.4	186.7	232.3	223.3	213.5	166.1	154.4
June ...	216.12	256.6	221.6	223.8	250.0	220.8	225.0	230.7	199.3	215.8
July ...	260.48	194.48	182.0	161.3	236.8	285.2	306.5	177.8	142.3	179.4
August ...	208.18	239.36	165.2	216.1	260.9	197.4	242.2	177.4	201.9	173.0
September ...	216.0	133.12	140.1	108.1	176.2	197.4	169.6	111.6	166.7	133.9
October ...	132.42	143.0	122.9	98.6	89.05	76.9	118.6	120.3	88.9	141.6
November ...	63.42	75.30	61.0	47.1	41.9	43.6	62.7	46.2	81.1	52.7
December ...	59.54	37.0	36.8	51.8	35.0	19.5	39.0	73.9	26.9	51.8
Totals ...	1874.36	1641.66	1533.5	1475.2	1743.35	1671.0	1774.2	1532.5	1422.1	1566.2

TOTAL RAINFALL IN PAST YEARS.

1894	...	...	24.94 inches.	Rain fell on 193 days.			
1895	...	...	19.38 ,,	,,	,,	145	,,
1896	...	...	21.74 ,,	,,	,,	141	,,
1897	...	...	21.23 ,,	,,	,,	125	,,
1898	...	...	15.76 ,,	,,	,,	99	,,
1899	...	...	22.38 ,,	,,	,,	128	,,
1900	...	...	20.5 ,,	,,	,,	143	,,
1901	...	...	14.83 ,,	,,	,,	107	,,
1902	...	...	18.51 ,,	,,	,,	134	,,
1903	...	...	31.66 ,,	,,	,,	171	,,
1904	...	...	18.76 ,,	,,	,,	130	,,
1905	...	...	17.89 ,,	,,	,,	150	,,
1906	...	...	23.21 ,,	,,	,,	149	,,
1907	...	...	19.98 ,,	,,	,,	173	,,
1908	...	...	18.68 ,,	,,	,,	130	,,
1909	...	...	25.77 ,,	,,	,,	154	,,
1910	...	...	22.51 ,,	,,	,,	174	,,
1911	...	...	19.08 ,,	,,	,,	140	,,
1912	...	...	20.23 ,,	,,	,,	176	,,
1913	...	...	18.93 ,,	,,	,,	145	,,
1914	...	...	18.73 ,,	,,	,,	136	,,
1915	...	...	24.55 ,,	,,	,,	140	,,
1916	...	...	17.65 ,,	,,	,,	155	,,
1917	...	...	22.04 ,,	,,	,,	154	,,
1918	...	...	21.83 ,,	,,	,,	183	,,
1919	...	...	20.92 ,,	,,	,,	162	,,
1920	...	...	18.83 ,,	,,	,,	160	,,
1921	...	...	16.84 ,,	,,	,,	109	,,
1922	...	...	19.10 ,,	,,	,,	163	,,
1923	...	...	20.70 ,,	,,	,,	196	,,
1924	...	...	25.07 ,,	,,	,,	194	,,
1925	...	...	21.33 ,,	,,	,,	178	,,
1926	...	...	22.36 ,,	,,	,,	151	,,
1927	...	...	22.73 ,,	,,	,,	189	,,
1928	...	...	23.5 ,,	,,	,,	191	,,
1929	...	...	16.05 ,,	,,	,,	145	,,
1930	...	...	21.49 ,,	,,	,,	182	,,
1931	...	...	19.32 ,,	,,	,,	176	,,
1932	...	...	17.83 ,,	,,	,,	172	,,
1933	...	...	15.64 ,,	,,	,,	153	,,
1934	...	...	15.77 ,,	,,	,,	150	,,
1935	...	...	21.58 ,,	,,	,,	172	,,
1936	...	...	21.27 ,,	,,	,,	180	,,
1937	...	...	29.33 ,,	,,	,,	169	,,
1938	...	...	15.40 ,,	,,	,,	130	,,



Annual Report

OF THE

MEDICAL SUPERINTENDENT

OF THE

SOUTHEND

MUNICIPAL HOSPITAL

AT

ROCHFORD

FOR THE YEAR 1938

SECTION I.

MEDICAL STAFF.

WHOLE-TIME MEDICAL STAFF.

<i>Resident—</i>			
<i>Medical Superintendent ...</i>		SAMUEL CIEMAN, M.R.C.S. (Eng.), L.R.C.P. (Lond.).	
<i>Deputy Medical Superin- tendent</i>		JOEL N. STRAUSS, M.B., Ch.B., M.R.C.P. (Lond.), D.T.M. & H.	
<i>Assistant Medical Officers—</i>			
<i>Grade I.</i>		CLIFFORD W. F. BURNETT, M.B., B.S., M.R.C.S., L.R.C.P.	
<i>Grade II</i>		A. W. JOHN CRAFT, M.R.C.S., L.R.C.P. BRIAN B. BRIDGES, M.R.C.S., L.R.C.P.	
<i>Non-resident—</i>			
<i>Surgical Officer</i>		BERNARD J. SANGER, F.R.C.S. (Eng.).	

VISITING MEDICAL STAFF.

<i>Consulting Physician ...</i>		R. SLEIGH JOHNSON, M.D., M.R.C.P., D.P.H.	
<i>Consulting Surgeons ...</i>		DONALD BARLOW, M.S., F.R.C.S. (Eng.). ROBT. H. CAMPBELL, F.R.C.S. (Eng.). RODNEY MAINGOT, F.R.C.S. (Eng.).	
<i>Consulting Gynæcologist and Obstetrician</i>		J. LYLE CAMERON, F.R.C.S. (Eng.).	
<i>Consulting Orthopædic and Fracture Surgeon ...</i>		B. WHITCHURCH HOWELL, F.R.C.S. (Eng.).	
<i>Consulting Radiologist ...</i>		G. WHITE PHILLIPS, M.D., D.M.R.E.	
<i>Consulting Ophthalmic Surgeon</i>		*DANIEL D. EVANS, M.C., M.A., M.B., B.Ch., D.O.M.S., M.R.C.S. (Eng.)	
<i>Consulting Ear, Nose and Throat Surgeon</i>		*C. HAMBLÉN THOMAS, F.R.C.S. (Eng.).	
<i>Consulting Neurologist ...</i>		*T. ROWLAND HILL, M.D., M.R.C.P.	
<i>Consulting Pædiatrician ...</i>		*J. N. O'REILLY, M.A., D.M., M.R.C.P.	
<i>Consulting Psychiatrist ...</i>		*ROLPH STRÖM-OLSEN, M.D., B.Sc., B.Ch., D.P.M.	
<i>Consulting Dermatologist ...</i>		*ARTHUR BURROWS, M.D., M.R.C.P., D.M.R.E.	
<i>Consulting Anæsthetists ...</i>		*J. H. T. CHALLIS, M.R.C.S. (Eng.), L.R.C.P. (Lond.). *VERNON HALL, M.R.C.S. (Eng.), L.R.C.P. (Lond.).	
<i>Tuberculosis Officer</i>		GEORGE N. MEACHEN, M.D., M.R.C.P.	

The foregoing Specialists are available at regular sessions excepting those whose names are marked with an asterisk who attend when summoned in connection with special cases as and when required.

The Visiting Staff has been augmented by the appointment of Dr. Arthur Burrows, M.D., M.R.C.P., D.M.R.E., as Consulting

Dermatologist to the Hospital. He acts in this capacity at the Southend General Hospital and his advice and opinion in obscure and intractable skin cases and in the application of radium in patients requiring it will be invaluable.

The services of the Consultant Staff continue to be a distinct asset to the Hospital and contribute in no small measure to the steady improvement in the standard of work done and to the progressive advance in method and technique of diagnosis and treatment. There has been a definite increase in the proportion of operations of major magnitude. The progress in this direction has been limited only by the pressure on the accommodation which has been most conspicuous in the gynæcological department (25 beds). Had the beds been available a larger number of specialist gynæcological cases awaiting admission for operation could have been treated.

In view of the difficulty periodically encountered in obtaining the services of the Visiting Gynæcologist and Obstetrician in emergency, consideration is being given to a proposal to engage a whole-time Specialist Gynæcologist and Obstetrician who shall be available for regular and emergency sessions at the Hospital in addition to any other duties that may be assigned to him in the interests of the Maternity services of the Borough.

With regard to the fracture and orthopædic service, specialist opinion and operative work have been most useful and advantageous in respect of the orthopædic cases and problems. In addition, some measure of continuity has been achieved in connection with such fracture cases as may be interchanged between the appropriate department of this Hospital and the Fracture Clinic of the Southend General Hospital.

The development of the sphere and scope of the work of the Visiting Staff has naturally been not unattended with certain difficulties as to special apparatus and equipment and as to the staff, both medical and nursing. The difficulties in connection with the former are being gradually surmounted. The Matron's increasing difficulty in obtaining staff renders it frequently impossible to have sufficient senior nurses available when the Consultants see cases in the Wards.

Mr. N. E. Pitt, F.R.C.S. (Eng.), Deputy Medical Superintendent, tendered his resignation, effective on the 1st November, consequent upon his appointment as Surgeon at one of the Hospitals of the Surrey County Council. To the Health Committee's appreciation of the valuable services rendered by Mr. Pitt since his appointment in 1934, I wish to add my tribute to his ability in both clinical and operative surgery. He added materially to the Hospital's prestige, did much to raise the standard of work in the surgical and fracture wards of the Hospital and inspired the respect and esteem of both patients and staff.

Following upon Mr. Pitt's resignation it was decided to augment the whole-time Medical Staff of the Hospital by the appointment of a non-resident Surgical Officer. Mr. Bernard J. Sanger, F.R.C.S. (Eng.) has been appointed to this newly constituted post and will commence duty on the 16th January.

Dr. J. N. Strauss, M.B., Ch.B., M.R.C.P. (Lond.), D.T.M. & H., who had previously been engaged in a temporary capacity at the Hospital was appointed Deputy Medical Superintendent. Dr. Strauss had already demonstrated exceptional ability as a Physician and it is confidently expected that his special knowledge will elevate the standard of work in Medicine as did his predecessor in the department of Surgery.

In order that the Hospital may be given a fuller, more specialised and more expeditious medical service, an additional Medical Officer is required. A Medical Officer with special experience in the administration of anæsthetics and responsible for the work of this department, the scope and application of which both in surgery and obstetrics is growing, would enable the other medical officers to devote more time to their ward work which is constantly becoming more and more exacting.

NURSING STAFF.

Matron — MISS ALICE STREET.

Actual permanent resident staff on 31st December, 1938 ...				124
Assistant Matrons ...	...	2	Night Sisters ...	2
Home Sisters ...	...	2	Staff Midwives ...	4
Night Superintendent ...	...	1	Theatre Staff Nurses ...	2
Sister Tutor ...	...	1	Staff Nurses ...	9
Theatre Sister ...	...	1	Probationer Nurses ...	86
Ward Sisters ...	...	13	Pupil Probationers ...	1
Number of the above Probationer Nurses in the initial 3 months' trial period ...				8
Number of Pupil Probationers taking the Municipal College preparatory course for the Test examination of the General Nursing Council ...				1
Non-resident staff on 31st December, 1938 ...				33
Male Nurses, Grade I. ...	...	2	Male Mental Charge Nurses	2
Male Nurses, Grade II. ...	...	5	Male Mental Nurses ...	6
Theatre Orderly ...	...	1	Female Mental Charge	
Massage Sister ...	...	1	Nurses ...	4
Masseuses ...	...	2	Female Mental Nurses ...	10

Authorised Staff:				1938	1937
Resident	...	...	...	136	136
Non-resident	...	...	...	37	36
Totals				173	172
On duty on December 31st:					
Resident	...	...	...	112	119
Non-resident	...	...	...	25	32
Totals				137	151
Average daily complement:					
Resident	...	...	...	97	110.3
Non-resident	...	...	...	26.4	33.7
				123.4	144.0

Average daily ratio of patients to Nursing Staff:

General	...	...	3.96 : 1.0	} 3.0 : 1.0
Mental	...	...	1.85 : 1.0	

Other Staff — Non-Resident :

<i>Chaplains</i>	...	Ven. Archdeacon Ellis N. Gowing.		
		Father V. Hemming.		
		Rev. A. Jones.		
<i>Pharmacist</i>	...	...	...	W. Swallow, M.P.S.
<i>Radiographer</i>	...	...	...	W. H. Williams, M.S.R.
<i>Assistant Dispenser</i>	...	...	...	A. C. Ricks.
<i>Matron's Secretary</i>	...	...	...	Miss G. Fardon

Miss A. Fryer, who was appointed Second Home Sister on 1st September, 1937, resigned to take up a post as Ward Sister at the National Sanatorium, Benenden, Kent, and was succeeded by Miss A. Simpson on 1st November, 1938.

It is with regret that I have to record the resignation of the Sister Tutor, Miss M. E. Gould, who was appointed Sister Tutor in 1935 and who piloted the Training School through an exceptionally difficult period with excellent results. Both the Hospital and the Training School were fortunate in having a teacher of such high ideals who was indefatigable in her efforts to assist the probationers in training and whose inspiring influence was felt throughout every department of the Hospital.

Miss A. Hanvey, previously Sister Tutor at the Royal Westminster Ophthalmic Hospital was appointed to succeed Miss M. E. Gould and commenced duty in March, 1938. Miss Hanvey obtained her Sister Tutor's Certificate of Battersea Polytechnic in July, 1938, and is to be congratulated on her achievement.

The demands made upon the time of the Male Nurses who constitute the male nursing staff of St. Clement's Ward (Male Chronic and Genito-urinary) are such that the remaining male wards of the Hospital are inadequately served. The need for the services of an additional male nurse for the routine and remedial bathing of patients, for their pre-operative preparation and catheterization in male wards other than St. Clement's Ward is becoming daily more apparent and the appointment of a male nurse for duty in these wards would assist considerably in the treatment of male patients generally.

Nurses' Training School.

In December, 1926, the Hospital was approved by the General Nursing Council as a complete training school for Nurses. After a preliminary three months' trial period, probationer nurses enter upon a three years' course of training, on completion of which they are required to sit for the final state examination for admission to the general part of the State Register of Nurses.

Under the revised rules of the General Nursing Council which came into operation on the 1st January, 1938, applicants for entry into a training school are not entitled to sit for the preliminary examination of the Nursing Council which is held after the completion of one year's training unless (a) they have passed the Nursing Council's Test Examination, or (b) they have passed the Matriculation Examination of the University, or (c) they hold the School's Certificate of certain Examination Boards or Universities.

Following discussions with the Chief Education Officer and the Principal of the Municipal College and with the approval of the Education Committee, five part-time courses a year have been arranged to enable girls selected by the Matron to receive special tuition in preparation for the Test Examination of the General Nursing Council. The course extends over a period of two months and includes lectures of 15 hours a week at the Municipal College and study, tuition and approved duties at the Hospital during the course.

Despite the tuition facilities afforded to enable selected applicants to pass the Test Examination, the difficulties experienced in securing an adequate number of Probationer Nurses continues to give cause for concern.

The authorised staff deemed necessary to cope with the number and type of patients accommodated cannot be obtained and the shortage of suitable entrants into the Nursing Staff which has extended over a period of at least 4 years adds to the work and responsibility of the Senior Staff and creates a situation in which the number of senior probationers is inadequate. The difficulties of maintaining a high standard of nursing and of devoting time to the practical training of nurses in the wards have been still further enhanced by the impossibility of obtaining the authorised number of staff nurses. These difficulties are reflected in the ever-increasing resort to temporary nurses. During 1938, 51 temporary trained

nurses were engaged for a total period of 380 weeks, 12 temporary staff midwives were engaged for a total period of 79 weeks and 4 temporary male nurses were engaged for a total period of 36 weeks.

The immediate solution to the difficulty in obtaining and maintaining an adequate number of staff nurses appears to be to establish at the Hospital a midwifery training school, thus retaining the services of those probationers who have completed their training and have passed the Final Examination of the General Nursing Council but who at present leave the Hospital in order to study and prepare for their C.M.B. Certificate.

The summary of the results of the three State Examinations held in 1938 is as follows:—

			Entered	Re-entered	Total	Passed	Failed
Preliminary	...	...	14	9	23	11	12
Final	...	...	17	4	21	13	8
Grand Total	...		31	13	44	24	20

Seven Probationers who failed in their examination in 1937 re-entered in February, 1938, 4 passing at their second attempt, 2 at their third attempt and 1 being unsuccessful.

Of the 23 Probationers who sat for the Preliminary State Examination 47.8% were successful, whilst of the 21 Probationers who were candidates for the Final State Examination 61.9% passed. The corresponding percentages of successes for 1937 were 76% and 73.6% respectively.

The increase in the percentage of failures in the Preliminary and Final Examinations is attributed to:—

(1) The present necessity for the acceptance of candidates who left school at an early age, and whose educational standard is relatively very low.

(2) Longer off-duty time, involving less time for practical instruction in the Wards when on duty, and a disinclination on the part of the nurses in training to devote any of their extra off-duty time to study.

The annual School Examinations were held in March, 1938. A cup is awarded annually to the Probationer who in her year receives the highest marks at the School Examination. Mr. R. H. Campbell, Consulting Surgeon to the Hospital, also presents a prize to the best examinee in surgery. His Worship the Mayor,

Mr. Alderman H. A. Dowsett, presented book prizes to the winners of the cups. The cups were awarded as follows:—

	Entered	Passed
3rd Year Examination—Cup presented by Miss Wood. Won by Nurse Nada Smith	19	19
2nd Year Examination—Cup presented by Mrs. Councillor Leyland. Won by Nurse Winifred Adams	24	23
1st Year Examination—Cup presented by the late Miss Jones. Won by Nurse Winifred Haines ...	26	23
Examination in Surgery—Prize presented by Mr. R. H. Campbell. Won by Nurse Winifred Adams	23	21

An outside Examiner was engaged to visit the Hospital and examine the Probationers in March, 1938, and her findings were the subject of a report.

Of the 38 Probationers who were accepted for training during 1938, 20 passed the Test Examination following attendance at a course provided by the local Education Authority at the Municipal College, 8 passed the Test Examination elsewhere and 3 had passed the Matriculation Examination or held the School Leaving Certificate.

Of the 20 Pupil Probationers who entered the Test Examination following a course at the Municipal College, 18 were successful at the first attempt and 1 passed after re-sitting the Examination.

36 Nurses spent one week in the Preliminary Training School before being posted to their wards. From all points of view, that of the Probationer, of the Ward Sister and of the patient, it is highly desirable that duty in the wards should be preceded by a longer period of preliminary instruction in the Training School, but shortage in and inability to fill the depleted ranks of the Nursing Staff have prevented every attempt to adopt this principle.

24 nurses left the Hospital during the course of their training in 1938 as compared with 18 in 1937. 4 nurses left the Hospital within six months of passing the Test Examination following attendance at the course provided at the Municipal College. 1 Pupil Probationer left the Hospital while preparing for the Test Examination.

13 nurses completed their training during the year and received their Training School Certificate on completion. The corresponding number in 1937 was 12.

5 Probationers were promoted to the rank of Staff Nurse during the year as compared with 6 in 1937.

In addition to the lectures, demonstrations, tests and examinations given by the Matron, Sister Tutor, Theatre Sister and the Hospital Pharmacist, courses of lectures were given and examinations conducted by the Deputy Medical Superintendent and continue to be given by members of the Visiting Staff in their respective subjects.

The Training School Library has received valuable additions from the Health Committee, which are much appreciated both by the Sister Tutor and by nurses in training.

Sickness in Nursing Staff.

The need for allocating accommodation entirely for sick nurses continues to become more imperative. There are periods during which the number of sick staff renders it necessary for them to be treated in a general ward of patients, accommodation for whom is already very inadequate. The nursing of probationers and patients in the same ward is in practice unsatisfactory, is disquieting to the patients and is not calculated to promote content and happiness among the members of the nursing staff. Particulars of the nature of the illnesses which led to nurses being off duty are shewn in Table I in the Appendix.

In view of the relatively high incidence of Diphtheria among members of the Resident Nursing Staff, facilities have, by arrangement with the Medical Superintendent of the Borough Sanatorium, been afforded for such members of the staff who desire it to receive Diphtheria immunization.

Nurses off duty during the year.	1938	1937
Resident	81	68
Non-resident	13	29
Nurses off duty more than once during the year (included in the above): ...		
Resident	26	15
Non-resident	3	5
Nursing days lost:		
Resident	2232	1885
Non-resident	345	615
Average number of nursing days lost per annum:		
Per Sick Nurse	27.4	27.7
Per Nurse on average daily strength	20.8	17.3

SECTION II.

ACCOMMODATION.

The total complement of beds provided for sick, maternity and mental cases on the 31st December, 1938, excluding cradles in the Maternity Wards, was:—

(a) For men	166
(b) For women	254
(c) For children under 16	35
Total	455

The following table shows the classification of the accommodation and the number of beds occupied on the 31st December, 1938:—

Classification of Cases					Wards	Provided	Oecupied
Male—Medical	...	...	...	...	4	51	42
—Surgical	...	...	...	...		60	59
—Chronic Sick	...	...	...	...		10	8
Female—Medical		...	...	...	6	68	66
—Surgical		...	...	...		70	66
—Chronic Sick		...	...	...		35	35
Children under 16	...	...	...	...	1	35	42
Maternity—Beds	...	...	...	...	1	32	15
—Cradles	...	...	...	...		—	—
Tuberculosis—Male	...	...	...	...	1	14	14
—Female	...	...	...	...	1	11	11
Isolation	...	...	...	...	—	—	—
Mental—Male	...	...	...	...	1	31	12
—Female	...	...	...	...	1	38	27
Mental Defectives—Male	...	...	...	...	—	—	5
—Female	...	...	...	...	—	—	5
Totals					16	455	407

The children in excess of the beds and cots provided in the Children's Ward must of necessity occupy beds in other wards normally allocated to adults. On December 31st the number of beds occupied in the Children's Ward was 21 and the remaining 21 children were distributed amongst the adult wards. In the event of the occurrence of a case of infectious illness in the long children's ward the whole ward must of necessity be placed in quarantine as the available accommodation does not lend itself to segregation. As a consequence, sick children must be admitted to adult wards unless lack of accommodation therein precludes it. It must be conceded that it is psychologically injurious for children to be treated in a ward of adults and likewise the disturbing cries and noise of children are not conducive to a proper atmosphere of recovery for the adult sick.

Female Tuberculosis cases are of necessity accommodated in separation rooms of a ward allocated for the treatment of other medical diseases. Male Tuberculosis cases are accommodated in a special section of a medical ward. Pressure on the accommodation is at times so serious that cases of Pulmonary Tuberculosis cannot be completely segregated and other medical cases have to be placed with patients suffering from Pulmonary Tuberculosis or *vice versa*, thus accentuating the nursing difficulties and adding to the anxiety and apprehension of both the patients and their relatives.

Thorpe Ward, previously used for male accident cases, has been adapted as a Maternity Unit and was opened as a self-contained Maternity Department (30 beds) on June 2nd, 1938.

Expectant and lying-in mothers with their infants were transferred to Thorpe Ward from both Chalkwell and Canewdon Wards and the male accident cases in Thorpe Ward were safely transferred to the vacated Chalkwell Ward.

Since the adoption of the new procedure in connection with the admission of normal ante-natal cases, by admission to Hospital at the onset of labour instead of at an interval of 3 days before the anticipated date of confinement, there has been no undue pressure on the accommodation in the Maternity Unit, this being in the main due to the continued restriction of admissions to patients requiring confinement in hospital for medical reasons or on account of unsatisfactory home conditions.

In order that the accommodation provided in the Chalkwell-Rochford Block should be for male patients exclusively and that in the Thorpe-Milton Block for female patients, the Rochford Ward chronic female cases were transferred to Milton Ward and the Milton Ward male medical and tuberculosis cases were moved to Rochford Ward on the 7th June, 1938. This change made it possible for the two-bedded room in Rochford Ward previously utilized as a Porters' Cloak Room, to revert to its proper use as patients' accommodation.

The vacating of Canewdon Ward previously accommodating lying-in mothers and infants and its part utilization as a mattress and rubber goods store, and as a Male Nurses' Cloak Room, made it possible for a single bedded room in Windsor Ward (female) and a three-bedded ward in St. Clement's Block (male) to revert to their former use as patients' accommodation.

The conversion of the two overcrowded six-bedded sections of Chalkwell and Rochford Wards into four two-bedded rooms has resulted in a reduction of the male accommodation by four beds, but with advantage to the patients treated therein.

The accommodation in the male and female mental wards does not permit of the proper segregation and treatment of such mental defective cases as are detained in the mental block. All cases, whether senile, psychotic, confusional or mental defective, are obliged to share the same common day room.

During the past year despite the various steps taken, emergency and otherwise, to deal with the problems of accommodation, the question of the provision of beds for patients requiring hospital treatment has become much more acute. Fortunately, the altered Maternity accommodation and the new procedure in relation to the admission of normal ante-natal cases has removed the unsatisfactory and cramped conditions which had hitherto obtained in this department. The children's ward and male and female wards of every category have been particularly affected so that extra beds have constantly to be provided, accentuating the difficulty of nursing and bedside care and seriously embarrassing the patients in wards in which ordinarily they are abnormally close to one another. Proper classification of the cases

admitted is now quite impossible so that a proportion of the children are placed in adult wards, the young and elderly, the acute and the chronic, the surgical or genito-urinary and the chronic, the accidents and the chronic, the quiet or those who need absolute quiet and the delirious are treated side by side. At periods, the pressure on the accommodation necessitates the erection of a total of 50 to 60 extra beds in excess of the complement and a single ward may have as many as 10 extra beds. Children recommended for admission are frequently being referred to the Southend General Hospital or their admission deferred. Similarly, it is becoming a commonplace for admissions of adults to be deferred, priority being given to accidents, emergencies and those who are acutely or seriously ill.

In my opinion, the dangerous limit of the number of patients admitted and the rapidity of turnover has been reached. The safety of this limit has only been maintained by the vigilant supervision of the staff concerned and reflects great credit upon the nursing staff, constantly below the authorised number, who have to shoulder the extra duties imposed upon them under increased difficulties. It must be pointed out, however, that the maximum strain that can be placed upon the nursing staff in its ward duties has been reached.

SECTION III.

STRUCTURAL DEVELOPMENTS.

The hospital extensions, commenced in April, 1938, and comprising a Children's Block, a Maternity Block with a self-contained Isolation Unit, a Tuberculosis Block, a general ward block, a Reception Unit, Administrative Block with quarters for the Resident Medical Staff, Kitchen and Staff Dining Rooms, Nurses' Home and Training Unit, Matron's House, Stores, Garages, Power House and Mortuary are well under way. Foreknowledge of how well endowed and equipped the Hospital will be and the visible growth of the new buildings serve as a stimulus to the staff. Every possibility of improvement of the present serious conditions of overcrowding of patients and staff has been explored but the only solution is the added accommodation which the new extensions in course of erection will provide.

On the 12th October, 1938, the Hospital was honoured by the visit of H.R.H. the Duchess of Kent when, in the presence of His Worship the Mayor, Alderman H. A. Dowsett, Esq., J.P., the Town Council, Officials of the Corporation and a distinguished gathering, she laid the foundation stone of the hospital extensions, signalling a new epoch in the hospital's development.

The new Waiting Hall was opened for the use of patients' visitors on 27th November, 1938, and visitors have commented very favourably upon its comfort and convenience and on the facilities thus provided, enabling patients to receive additional visitors on visiting afternoons.

The new annexes of Chalkwell and Rochford Wards are now nearing completion and are intended to provide a ward utility service superseding inadequate and unhygienic arrangements.

HOSPITAL LIBRARY.

A Hospital Library for use of the patients has been established, 400 carefully selected books from the Corporation Library, duly catalogued, being kept in special library cupboards which are allocated to all the wards. The book service thus made available is very much appreciated by the patients.

SECTION IV.

GENERAL WORK OF THE HOSPITAL.

This is outlined in the form of statistical tables and analyses which classify in detail the work of the Hospital during the year.

On the 2nd June, 1938, the total accommodation was increased from 454 to 461 when Thorpe Ward was re-occupied in its entirety after conversion into a Maternity Unit and Canewdon Ward (7 beds) which previously formed part of the Maternity Department was vacated.

On the 7th June, 1938, the patients in Milton and Rochford Wards were interchanged permitting of the re-occupation of the Porters' Room in Milton Ward by female patients, thus increasing the accommodation from 461 to 463. Simultaneously, a single-bedded room in Windsor Ward (female), previously used as a mattress store, became available for patients, thus increasing the bed complement to 464.

From 31st August, 1938, the complement of beds was reduced from 464 to 461 when the 6-bedded section of Chalkwell Ward (male) was vacated for alterations and the 3-bedded side ward of St. Clement's Block was re-occupied by male patients.

On 13th September, 1938, the total accommodation was still further reduced from 461 to 455 to permit of the 6-bedded section of Rochford Ward undergoing certain alterations.

The total number of admissions (including infants born in Hospital) was 4,530 as compared with 4,802 in 1937 when the complement of beds was more constant and not subjected to the reductions necessitated by structural alterations and adaptations taking place in the wards. The advent of the crisis in September, 1938, also contributed to the reduction in the total number of patients admitted to Hospital.

The number of women confined in Hospital was 427; the corresponding figure for 1937 was 374, an increase of 53 or 14.1%.

The average weekly admission rate is 87.1 whilst last year the figure was 92.3.

The total number of patients treated to a conclusion (including infants born in Hospital) is 4,532 as compared with 4,815 in 1937.

The total number of deaths is 743, the corresponding figure for 1937 being 814.

The duration of stay of all patients:—

	1938		1937		1936	
	Number	Percent- age of Total	Number	Percent- age of Total	Number	Percent- age of Total
(a) Four weeks or less...	3,252	71.7	3,587	74.5	3,052	69.0
(b) Four weeks and under thirteen weeks	1,034	22.8	950	19.7	1,088	25.0
(c) Thirteen weeks or more	244	5.3	278	5.8	268	6.0
Totals	4,530		4,815		4,408	

It will be noted from the above table that the proportion of chronic cases continues to decrease, scarcely more than one in twenty patients requiring prolonged hospital treatment. This may be regarded as an indication of the preponderance of acute work which is done at the Hospital.

The average number of beds occupied during the year was 435.8, the figure for the previous year being 438.7. The average available bed complement was reduced, however, from 486.6 to 457.

The average daily percentage of available beds occupied in 1938 was 95.19, the corresponding figure for 1937 being 96.8 and for 1936 93.3.

The maximum number of beds occupied during the year was 468 on September 3rd and 6th and the minimum number of beds occupied was 392 on October 2nd, immediately after the crisis when a large number of patients were discharged and only cases seriously ill or requiring immediate operative treatment were admitted.

The average length of stay per patient was 35 days, while in the previous year it was 33.1 days, representing a slight increase of 1.9 days per patient. This is largely accounted for by the increasing number of cases requiring lengthy preliminary investigations, the majority on the recommendation of the Visiting Staff,

STATISTICAL TABLES AND ANALYSES.

Remaining in Hospital on 1st January, 1938	...	...	409
Admitted	...	...	4130
Born alive in Hospital	...	...	400
			4,939

Discharged	...	...	3789
Died	...	...	743

Patients treated to a conclusion during the year	...	4532
Remaining in Hospital on 31st December, 1938	...	407

Classification of patients treated to a conclusion:—

Children under 16	...	...	...	...	953
Men	...	...	...	...	1302
Women	...	...	...	...	2277
				Total	4532

Children under 16 constitute approximately 21% of all patients treated. 18% was the proportion for 1937.

Table II in the Appendix shows how the 4,532 patients treated to a conclusion during the year were originally admitted. Table III shows whither they were discharged and Table IV gives a classification of the diseases and conditions for which they were primarily treated.

Cancer patients under treatment during the year numbered 157 as compared with 192 during 1937 and Tables V and VI give a classification of the cases according to site affected and according to sex and age of the patients who died.

The following table gives an analysis of the deaths according to age groups:—

Ages	General			Mental			Total 1938	Total 1937
	Male	Female	Total	Male	Female	Total		
Under 10 days	5	7	12	—	—	—	12	12
Under 4 weeks	3	3	6	—	—	—	6	6
Under 1 year	9	9	18	—	—	—	18	30
1—5	3	1	4	—	—	—	4	7
5—10	3	1	4	—	—	—	4	3
10—20	8	6	14	—	—	—	14	16
20—30	4	14	18	—	1	1	19	22
30—40	16	12	28	—	—	—	2	33
40—50	15	21	36	—	—	—	36	52
50—60	46	46	92	—	3	3	95	105
60—70	87	73	160	—	2	2	162	160
70—80	109	100	209	3	8	11	220	234
80—90	57	51	108	5	3	8	116	120
90—100	3	5	8	—	1	1	9	14
Totals	368	349	717	8	18	26	743	814

A survey of the hospital mortality return reveals the fact that with the exception of the first year of life there is a progressive increase in the number of deaths especially in the ages over 60 whilst the number of deaths over the age of 70 is more than three and a half times that of the 50—60 age group. 68% of the total number of deaths during the year are accounted for by cases over the age of 60. There is a marked decrease in the number of deaths among children under one year; 36 in this age group having died as compared with 48 in the previous year.

AVERAGES FOR THE YEAR.

	1938	1937
Beds—Daily complement	457	486.6
Beds—Average daily number available ...	457	454.8
Beds—Average daily number occupied ...	435	438.7
Average daily percentage of available beds occupied	95.18%	96.8%
Admissions—Average daily number ...	12.4	13.1
Stay—Average length in days per patient ...	35	33.1
Deaths—Average case mortality % ...	16.4	16.9
Maximum number of beds occupied— (3rd and 6th September, 1938) ...	468	494
Minimum number of beds occupied— (2nd October, 1938)	392	400
Patients per occupied bed—		
Average number per annum	10.4	10.9
Nursing Staff (Resident and Non-resident)—		
Average daily complement	123.4	144
Nursing Staff—		
Average daily complement—Resident	97	} 110.3
,, ,, ,, —Non-resident	26.4	
	123.4	
Average daily ratio of patients to Nursing Staff—		
Resident and Non-resident ... 3.96 : 1	} 3.0 : 1	
Non-resident, Mental Wards ... 1.85 : 1		

Total number of children under 5 years of age admitted during
1938: (excluding infants born in hospital)

					Male	Female	Total
Borough	...	...	...	...	72	52	124
County	...	...	...	...	60	27	87
Totals					132	79	211

	Treated	Per-centage of Total	Died 1938	Died 1937	Case Mortality % 1938	Case Mortality % 1937
Medical cases (male) ...	774	17.0	259	600	33.3	22.5
Medical cases (female)...	1,509	33.3	237		15.7	
Surgical cases (male) ...	774	17.0	109		14.1	
Surgical cases (female)...	844	18.8	107	194	12.7	10.3
Obstetric cases ...	427	9.5	5		1.2	
Mental cases (male) ...	72	1.5	8	20	11.1	7.1
Mental cases (female) ...	132	2.9	18		13.5	
	4,532		743	814		

	1938	1937	Per-centage of deaths 1938	Per-centage of deaths 1937
Deaths within 12 hours of admission (male) ...	17		6.0	
Deaths within 12 hours of admission (female) ...	27			
Deaths 12 to 24 hours after admission (male) ...	29	52	6.2	13.5
Deaths 12 to 24 hours after admission (female) ...	17	58		
Deaths 24 to 48 hours after admission (male) ...	25	48	6.3	8.7
Deaths 24 to 48 hours after admission (female) ...	22	23		
Deaths 48 to 72 hours after admission (male) ...	16	18	6.0	4.7
Deaths 48 to 72 hours after admission (female) ...	29	20		
All other deaths (male) ...	296	282	75.5	73.1
All other deaths (female) ...	265	313		
Total deaths ...	743	814		

SECTION V.

THE SPECIAL DEPARTMENTS.

The following table summarizes the work of the Special Departments.

1. Surgical—						1938	1937
Major Operations—Emergency	521					} 953	830
—Other ...	432						
Minor Operations ...	...	...	...	...	...	665	671
						1618	1501
2. Ear Nose and Throat Operations ...	...	...	...	...	...	*115	91
3. Orthopædic Operations ...	...	...	...	...	...	* 26	25
4. Fractures ...	...	...	...	...	...	*154	123
5. Thoracic Surgery ...	...	...	...	...	...	* 5	8
6. Anæsthetics—							
General ...	...	...	...	...	...	475	575
Spinal ...	...	...	...	...	...	385	299
Caudal Block—							
(with or without local anæsthesia)						69	84
Evipan Sodium and Pentothal Sodium						484	412
Avertin ...	...	...	...	...	...	5	7
Local Anæsthesia ...	...	...	...	...	...	106	118
						1524	1495
7. Radiological—							
Patients investigated ...	...	...	...	...	...	2403	2288
Examinations ...	...	...	...	...	...	5925	5051
8. Physio-therapeutic—							
Patients	...	...	...	...	...	369	250
Treatments ...	...	...	...	...	...	11082	7797
9. Maternity—Number admitted—							
Borough ...	...	...	...	...	...	330	300
County ...	...	...	...	...	...	164	139
						494	439
Number confined—							
Borough ...	...	...	...	...	...	295	256
County ...	...	...	...	...	...	132	118
						427	374
Live Births ...	...	...	...	...	...	400	364
Obstetric Operations ...	...	...	...	...	...	** 84	67

10.	Tuberculosis—						
	Artificial Pneumothorax Treatment—						
					In-	Out-	
	Inductions	...	...	...	patients	patients	
					7	—	
	Refills	...	...	...	84	693	
11.	Pathological—				1938	1937	
	Investigations	...	...	...	2000	2091	
12.	Nurses' Sick Room—						
	Admissions	...	...	...	121	68	

* These operations are included in the total number of surgical operations—Item 1.

** 12 of these operations, viz., 6 Cæsarean Sections and 6 Surgical Inductions are included in the total number of surgical operations—Item 1.

(a) *Fractures.*

The Fracture Unit of this Hospital having been placed under the same professional supervision as the Fracture Clinic at the Southend General Hospital, continuity of treatment and unity of control in the area are being achieved. With few exceptions, all fracture cases are attended by and treated on admission by the Surgical Officer, are visited by him and the progress reviewed daily. The consulting Orthopædic and Fracture Surgeon who is also Director of the Fracture Clinic at the Southend General Hospital, attends weekly to advise and supervise the treatment of all fracture cases as well as deal with any orthopædic problems presented to him for consideration and treatment.

Segregation of Fracture cases has always been aimed at. One ward is allocated to male fracture cases, but until additional accommodation becomes available, female fracture patients cannot be concentrated in a ward with its specially trained team devoted exclusively to their treatment.

(b) *Operative Surgery.*

				1938	1937	1936
	Number of Surgical Operations—					
	Major—Emergency	...	521	953	830	754
	—Other	...	432			
	Minor	...	...	665	671	765
				1618	1501	1519
	Abdominal Sections	...	...	429	496	541
	Appendicectomies	...	...	233	205	207
	*Tonsils and Adenoids	...	...	84	71	96
	Dental Operations	...	...	117	117	130

* Dissection was the method of choice in 72 cases.

Further particulars as to the nature of the operations performed are given in Table IX in the Appendix.

The total number of operations performed during the year was 1,618 as compared with the 1,501 in the previous year, a material increase in view of the fact that all the operative work is carried out in a single theatre. An inhalation anæsthetic was administered in 475 cases, which is 100 less than the number of inhalation anæsthetics administered in 1937. There was a decided increase in the number of anæsthetics administered by the intrathecal route and a material increase in the number of intravenous anæsthetics.

Attention is again drawn to the increasing need for a dual Theatre Unit. This need has become strikingly apparent since the operative work that devolves upon the Visiting Surgeons is steadily being augmented. The existing solitary Operating Theatre has to cope with septic, infectious, puerperal and miscellaneous emergency cases in addition to and frequently simultaneous with an Operation List of surgically clean cases, an improper and indeed hazardous procedure. Formerly it was possible to inspect, adjust and where necessary overhaul the lighting, sterilizing, electrical and other technical theatre equipment and appliances with weekly regularity but now the opportunity for this very necessary routine seldom presents itself.

An extended duplicate Theatre service is now imperative and should provide for another Theatre Unit with a central sterilizing plant and central wash-up, an instrument storage and cleaning room, a workroom for sewing and preparation of dressings, etc., a store for appliances and theatre equipment, an enlarged linen store, a plaster room, a dark room for endoscopy and for eye, ear, nose and throat work and a dental surgery together with appropriate offices for the Theatre Sister and her staff and for the surgeons and attendant resident staff.

The Operating Theatre Nursing Staff still remains inadequate for the 24-hour service that the single theatre unit gives. The Theatre Sister and the Staff Nurses are called upon in rotation for night as well as day duty. In addition, the steady increase in the number and variety of operations performed by both the Resident and Visiting Staffs, the additional onus of supervision and training which falls to the lot of the Theatre Sister, justifies an augmentation of the staff as soon as possible. An additional staff nurse would relieve the Theatre Sister of night work and would permit of a Staff Nurse being allocated for night work only.

(c) *Analysis of methods of Anæsthesia adopted in the Operating Theatre.*

Inhalation Anæsthesia—

By Chloroform and ether sequence or mixture ...	348
By Ethyl Chloride and ether or mixture ...	44
By Ether ...	7
*By Nitrous Oxide with or without oxygen ...	74
By Cyclopropane ...	2
	475
Spinal Analgesia ...	385
Caudal Block with or without local anæsthetic	69
Local Anæsthesia ...	106
By Intravenous Route—	
Sodium Evipan ...	482
Sodium Pentothal ...	2
†By Rectum—Avertin ...	5
	1049
Total ...	1524

* In a number of cases the anæsthetic was supplemented by ether inhalation and in 2 cases was administered by the intratracheal route.

† In 4 cases the anæsthetic was supplemented by ether inhalation.

Anæsthetics were administered by—

Resident Assistant Medical Officers ...	1109
Deputy Medical Superintendent ..	87
Medical Superintendent ...	303
Consulting Anæsthetists and Surgeons (local anæsthetics) ...	25
Total ...	1524

The increased range in the variety of anæsthetic and analgesic agents continues to effect a reduction in the number of patients subjected to inhalation anæsthesia. The proportion of cases so anæsthetised during the current year was 31% compared with 38% during 1937 and 50% during 1936. The substitution of spinal and intravenous routes is largely responsible for this diminution in the number of inhalation anæsthetics. Pre-operative medication either in the form of twilight sleep or intravenous evipan sodium is almost invariably employed unless contra-indicated. Patients who are advised operative intervention are becoming better informed as to the safety and relative pleasantness of the modern anæsthetic procedures and face operation with an equanimity which was seldom encountered a few years ago.

As far as possible, inhalation and intravenous anæsthetics are administered by one of the Grade II Assistant Medical Officers who is especially interested in this type of work. It will be observed, however, that the Medical Superintendent and his Deputy were obliged to give a number of anæsthetics owing to the increasing demands made upon the time of the Assistant Medical Officers in their ward work. The magnitude and scope of the work in the department

of anæsthetics now necessitates the addition to the Resident Medical Staff of a Medical Officer with special experience in this branch who shall be the Resident Anæsthetist for the Hospital.

There were no deaths during anæsthetic administration in 1938.

(d) The Radiological Department.

Particulars of the number and nature of the investigations carried out are given in Tables X to XII in the Appendix.

There is again a material increase in almost all branches of Radiological work carried out at the Hospital. The number of radiological examinations in 1938 exceeds that of 1937 by 874, representing a 17.3% increase. X-ray investigations in cases of injury continue to constitute the largest class submitted to the Radiological Department, the total number being 871 as compared with 877 in 1937. The number of screenings of chest continues to rise, the total being 865, the corresponding figure for 1937 being 658. The majority of the screenings of chest are carried out by the Tuberculosis Officer when he attends at the Hospital in connection with his Out-patient Tuberculosis and Artificial Pneumothorax work.

The total number of cases reported upon by the Consulting Radiologist during the year was 2,322, of which 145 were Barium Meals.

A new Mobile shock-proof unit of high power and efficiency available for X-ray examinations in the majority of the wards and for certain investigations and operative work in the Operating Theatre has been purchased and supersedes the outworn portable apparatus which was not shock-proof. The provision of an additional light Portable Unit to be used in such wards as are inaccessible to the existing mobile set and in certain orthopædic procedures in the Operating Theatre is now under consideration.

During the year minor defects continued to reveal themselves in the Super-power X-ray unit. It has become increasingly apparent that the X-ray installation is by no means powerful enough for the modern technique of fast radiography of all regions, especially when applied to stout subjects, a class which constitutes a fair proportion of our cases.

Attention is directed herebelow to the increasing difficulties encountered in the work of this department.

- * (a) Lack of facilities and of waiting and dressing room accommodation for patients awaiting investigation.
- * (b) The space available in the department is so limited and cramped that the Consulting Radiologist and other members of the staff have no office to view films, and the clerical and recording work and the transport of patients are done under increasing difficulty.
- (c) Patients undergoing special investigation have to be transported considerable distances in the open and are frequently exposed to inclement weather conditions,

With regard to the staffing of this department, the question of the appointment of a nurse for special work in this department merits serious consideration. Such an appointment would add to the efficiency of the department, ensure appropriate handling of patients undergoing X-ray investigation and would permit of the ward nurse assigned to assist with the patient, returning to her ward as soon as she had delivered the patient at this department, a most important consideration in the presence of the continued shortage of nurses.

In the absence of apparatus and facilities for deep X-ray therapy, patients for whom this form of treatment is prescribed are conveyed to and from Southend General Hospital to receive the necessary courses of radio-therapy. In view of the fact that an increasing number of patients are being subjected to this form of treatment and in view of the fact that this class of patient is invariably rather ill both before and after treatment, the question of the provision of the necessary accommodation and apparatus for radio-therapeutic work should receive consideration.

* Referred to in my Annual Report of 1937 and 1936.

(e) The Physio-therapy Department.

The outstanding feature of this year's work as will be seen from Table XIII in the Appendix is the marked increase in the total number of patients treated, namely 369, as compared with 250 in 1937 and the corresponding rise in the number of treatments, namely 11,082, the figure for 1937 being 7,797. The increased application of physical medicine in treatment was made possible by the appointment of a third Masseuse to the staff of this department and by the expansion of the scope of the work by the addition of actino-therapeutic apparatus to the equipment which makes it possible to give artificial sunlight and ultra-violet light both in the department and in the wards of the Hospital.

The proportion of fracture cases treated in this department continues to diminish, standing at 14% compared with 28% in the previous year although the number of fracture cases are in excess of the 1937 figures. This is attributed to the success which continues to attend the application of Bohler's methods in promoting restoration of function.

The success of the work of this department can be measured by the number of cases treated successfully to a conclusion, 311 as compared with 208 in the previous year.

The single room which constitutes the physio-therapeutic centre for the Hospital is now so cramped that the staff is working under increasing difficulty. Patients receiving remedial gymnastics and actino-therapy are particularly affected owing to the very limited space available for these forms of treatment.

There is an insistent demand on the part of the resident and Visiting Staffs for ultra-short wave diathermy and for physiotherapy but the limited space available renders it impossible to accommodate the equipment necessary to meet the demand.

(f) *The Maternity Department.*

The Maternity Unit receives cases from the Borough Ante-natal clinics for investigation, for treatment of the complications of pregnancy and for confinement. Maternity cases resident outside the Borough are admitted on a Relieving Officer's Order and cases of emergency of ante-natal disease or of puerperal complications are admitted on a Doctor's recommendation.

The conversion of Thorpe Ward into an entirely self-contained Maternity Unit of 30 beds was completed on June 1st and the unit was occupied on June 2nd. The unit comprises Ante-natal and Post-natal sections, first stage and delivery rooms, separation rooms for pregnancy complications and for doubtful or potentially septic cases and the appropriate bathing service and utility accommodation for both mothers and infants.

Previously the work of the Maternity Department was carried out under very unsatisfactory conditions, partly in a small ward and partly overflowing into a mixed ward of patients with various ailments. The new unit provides suitable accommodation and the work is now carried out with efficiency and with safety to the mothers and their infants. It is also economical in staff, a very material consideration at a time when the supply of midwives does not appear to be equal to the demand.

In order that the Maternity accommodation be used to the best advantage, arrangements have been made for all normal ante-natal clinic cases to be admitted at the onset of, instead of three days prior to, the commencement of labour. In accordance with the recommendations of the Central Midwives Board, the lying-in period has been extended in normal confinements to 14 days with the acquiescence of the patients.

Self-administered Gas and Air as an analgesic in labour which was introduced into this department in March, 1935, continues to be very much appreciated by the mothers, and the staff supervising its administration continue to report very favourably on its efficiency in the relief of pain in a high proportion of cases.

Statistical Tables and Analyses of the cases treated in the Maternity Department during the year:

Number of mothers admitted—

			1938	1937	1936
Borough	...	...	330	300	323
County	...	...	164	139	123
			494	439	446

Number of the above cases who were confined at this Hospital—

Borough	...	...	295	256	281
County	...	...	132	118	104
			427	374	385

Mothers admitted for confinement—

Borough—

Via ante-natal clinics	...	...	268	234	267
As an emergency case	...	...	27	22	14
			295	256	281

County—

On Relieving Officer's Order	...	...	118	104	94
As an emergency case	...	...	14	14	10
			132	118	104

Total number of emergency cases admitted was 41 representing 9.16% of the 427 confinements.

Totals	...	427	374	385
--------	-----	-----	-----	-----

Civil state—

Married	...	...	378(88.6%)	340(91%)	357(93%)
Unmarried		...	49(11.4%)	34(9%)	28(7%)
	Totals	...	427	374	385

Parous state—

ous state—			<i>1938</i>	<i>1937</i>	<i>1936</i>
Primipara	...	...	168(39.3%)	144(38.5%)	155(40.2%)
Multipara	...	...	259(60.7%)	230(61.5%)	230(59.8%)
	Totals	...	427	374	385

Number of mothers referred for Pathological investigation.	...	...	...	1938	1937	1936
				39	44	37
Number of mothers referred for Radiological investigation.	...	...	...	35	—	—

Number of cases delivered by—

(a) Midwives	...	...	...	370	341	361
(b) Doctors	...	...	...	57*	33	24
	Totals	..		427	374	385

* Including 6 Cæsarean Sections.

Number of anæsthetics given for Obstetric purposes (not including self-administered gas and air)	84	67	75
Ante-natal external version	3		
Perineal repair	19		
Episiotomy and repair	6		
Surgical Induction by—			
(a) Rupture of membranes	2		
(b) Bougie or stomach tube	6		
(c) Drew-Smythe catheter	5		
Forceps Delivery	20		
Breech delivery	3		
Application of Willett's Forceps to Foetal Head	3		
Internal version	1		
Craniotomy	1		
Bilateral Cléidotomy	1		
Cæsarean Section	6		
Vaginal Hysterotomy	1		
For normal delivery of head	1		
For expression of placenta by Crede's method	—		
Manual removal of placenta	5		
Manual dilatation of cervix	1		
Total ...	84		

Number of cases in which Medical assistance was sought by midwife in emergency ...	77	44	40
Doctors delivered *40 women			
Ante-partum hæmorrhage ... 17 ..			
Post-partum hæmorrhage ... 5 ..			
Intra-natal eclampsia ... 2 ..			
Obstetric collapse 2 ..			
Retained Placenta 9 ..			
Difficulty in 2nd stage (with administration of anæsthetic) 1 ..			
Primary Uterine Inertia ... 1 ..			
Total ...	77 women		

* Includes 17 normal deliveries.

Number of cases notified as—	Hospital Deliveries	Delivered before admission
(a) Puerperal fever	1	5
(b) Puerperal pyrexia	7	13
Totals ...	8	18

	1938	1937	1936
Number of maternal deaths among women admitted to Hospital for confinement ...	5	3	3
Mortality per 100 Hospital confinements ...	1.1%	0.8%	0.7%
Average duration of stay of Maternity cases excluding cases admitted for ante-natal disease—			
Borough	19.6 days	20.1 days	21.4 days
County	18.9 days	19.9 days	21.6 days
Average length of lying-in period—			
Borough	14.5 days	15.2 days	15.5 days
County	14.1 days	15.0 days	14.0 days

Average duration of stay of Maternity cases prior to delivery, excluding cases admitted for ante-natal disease—

Borough	...	...	...	...	5.1 days	5.0 days	5.9 days
County	..	...	...	...	4.8 days	5.0 days	7.0 days

Number of live births (one set of twins)—

Borough	...	...	...	...	277	248	
County	...	...	...	...	123	116	
Totals					400	364	375

Average weight at birth of infants : 7 lbs. 4 ozs.

Weight of smallest infant born alive : 1 lb. 15 ozs.

Weight of largest infant born alive : 11 lbs. 2 ozs.

Number of Infant deaths (See Tables XVII and XVIII in the Appendix)—

Stillborn	...	...	...	...	28	14	16
Within 10 days of birth	...	...	...	...	11	8	3
Within 4 weeks of birth	...	...	...	...	4	1	2

Number of infants not entirely breast fed while in Hospital 29 30 19

Number of cases of Pemphigus Neonatorum ... — 1 —

Number of cases notified as Ophthalmia Neonatorum — 5 —

ANALYSIS OF THE 428 DELIVERIES WHICH TOOK PLACE DURING THE YEAR.

The presentations were as under:—

Vertex—

Occipito anterior	...	...	...	...	...	...	...	376
Occipito posterior	...	...	...	...	...	...	...	22

Breech—

Uncomplicated	...	...	...	...	...	...	...	12
Complicated	...	...	...	...	...	...	...	10
Face	...	...	...	...	...	...	...	—
Hand	...	...	...	...	...	...	...	1
Shoulder	...	...	...	...	...	...	...	—
Transverse	...	...	...	...	...	...	...	1

Caesarean Section 422 6

Born before admission 428 8

Total ... 436

There were two cases of prolapsed cord.

There was one set of twins, presentation being in sequence as follows :—

(1) occipito anterior. (2) occipito anterior.

Multiple cyesis and labour, normal and abnormal 0.25%.

The methods of delivery of the 428 infants born in Hospital were as follows :—

	No. of Births	Deaths		
		Maternal	Foetal	Neo-natal (4 weeks)
Natural forces	355	1	13	13
Natural forces after failed forceps	—	—	—	—
Natural forces after surgical induction	19	—	4	—
Forceps	18	—	1	—
Forceps after surgical induction ...	1	—	—	1
Forceps after vaginal hysterotomy	1	1	1	—
Manual of breech	12	—	—	1
Manual of complicated breech ...	10	—	3	—
Manual of transverse	—	—	—	—
Internal version	1	—	1	—
Craniotomy	1	—	1	—
Bilateral Cleidotomy	1	—	1	—
Caesarean Section	6	2	1	—
Application of Willett's forceps after artificial rupture of membranes	3	1	2	—
	428	5	28	15

Of the 22 Occipito-posterior position presentations 5 had a normal delivery following spontaneous rotation to the anterior position; of the remaining 17 cases, 11 were delivered spontaneously in the persistent occipito posterior position and the remaining 6 cases required manual rotation followed by instrumental delivery under general anæsthetic.

With 2 exceptions, the 20 instrumental cases were Primiparæ. They are classified hereunder according to the indication for application of forceps.

Persistent Occipito posterior	6
Prolonged labour—maternal distress	4
—fœtal distress	3
Uterine Inertia (Hydramnios)	1
Disproportion—minor degree of	4
Disproportion and Rigid soft parts	1
Post-maturity	1
Total ...	20

	1938	1937	1936
Forceps rate per 100 births	4.6%	2.1%	2.8%
Maternal morbidity rate after forceps delivery	5.0%	Nil	Nil

Medical Induction of labour was undertaken in 44 cases and was successful in 25.

Surgical Induction of labour was undertaken in 20 cases, in 7 of whom medical induction had failed. In 19 cases it was successful and delivery was by natural forces. Forceps were required in 1 case.

Indication	Number of cases submitted to Surgical Induction		
	Of premature labour	At or after term	Total
Pre-eclamptic toxæmia	3	1	4
Albuminuria and/or Hypertension ...	3	—	3
Disproportion	2	—	2
Post-maturity	—	1	1
Maternal disease :—			
Heart disease	1	—	1
Pyelo-nephritis	2	—	2
Chronic Nephritis and Pneumonia	1	—	1
Hydramnios	1	—	1
Bad Obstetric History	—	—	—
Ante-partum Haemorrhage	2	3	5
	15	5	20

There were 12 live births and 8 stillbirths (seven due to maternal toxæmia and 1 due to congenital malformation).

The following obstetric operations were necessary:—

Ante-natal external version	3
Internal version	1
Surgical induction of labour	20
Application of forceps	20
Manual delivery of complicated breech	10
Cæsarean Section	6
Plugging of Vagina	2
Artificial rupture of membranes	38
Episiotomy and repair	6
Repair of perineum	19
Craniotomy	1
Bilateral cleidotomy	1
Expression of placenta by Crede's method	5
Manual removal of placenta	5
Manual dilatation of cervix	1
Application of Willett's forceps to foetal head ...	2
Vaginal hysterotomy	1

The indications for which 6 Cæsarean Sections were done were as follows:—

Indication	Booked	Emergency	Total
Contracted pelvis and disproportion...	3	1	4
Placenta prævia	—	1	1
Ante-partum haemorrhage due to toxæmia	—	1	1
Totals	3	3	6

There were 6 classical and no lower segment operations.

Five Cæsarean sections were performed under Twilight Sleep and Spinal Analgesia, the remaining 1 being performed under Twilight Sleep and Inhalation Anæsthesia.

Maternal deaths	...	...	...	2
Fœtal deaths	...	...	...	1
Neo-natal deaths	...	...	...	—

The following table gives particulars of morbidity, i.e., all fatal cases and all cases in which a temperature of 100.4° or more was maintained for a period of 24 hours or recurred during that period in the puerperium (Ministry of Health standard). Cases of abortion and ectopic gestation are not admitted to this department and their morbidities are referred to elsewhere. No case of ectopic gestation was morbid.

Unless there is definite evidence to the contrary, every case of pyrexia occurring in the puerperium is assumed to be due to vaginal or uterine infection.

During the year 8 cases of puerperal pyrexia occurred amongst patients delivered in the Hospital; they all recovered and were discharged and there were no deaths.

Of the 26 women who had pyrexia in the puerperium, 13 were primiparæ.

Deliveries in Hospital	Booked	Emergency	Total
Total deliveries	387	41	428
Pyrexial cases that survived	2	6	8
Maternal deaths—pyrexial cases	—	1	1
Maternal deaths—apyrexial cases	1	3	4
Pyrexial cases and maternal deaths	3	10	13
Maternal morbidity per 100 delivered	0.7%	24.4%	3.0%

The following tables give details as to the Maternal Mortality:

Of 427 delivered in Hospital	5 died	...	1.1%
Of 386 booked cases	1 died	...	0.25%
Of 41 emergencies	4 died	...	9.75%

ABORTION.

Therapeutic Abortion and cases of threatened abortion are not included:—

			1938	1937
Cases treated to a conclusion	...	...	94	96
Deaths	...	...	Nil	1
Maternal mortality per 100 women who aborted			0%	1%

SECTION VI.

EXAMINATION OF PATHOLOGICAL SPECIMENS.

As will be seen from Table XIX in the Appendix, 2,000 specimens were examined during the year, as compared with 2,091 in the previous year. Of these 855 were examined at the Pathological Department of the Southend General Hospital, 215 by Professor Hewlett at the Seamen's Hospital, Greenwich, 352 at the Borough Sanatorium and 420 at the Municipal Hospital, the latter specimens comprising blood-chemical examinations, fractional test meals, and occult blood in fæces.

The number of post-mortem examinations carried out was 158, as under:—

- (a) On the bodies of 743 persons who died in Hospital 146 examinations were made, 7 being at the Coroner's request. This gives an autopsy rate of 19.6% as compared with 16% in 1937.
- (b) The remaining 12 examinations were made, 1 on a body of an inmate who died in Rochford House and 11 on persons brought in dead by the County Police.

- (c) The above 158 autopsies were performed by:—

Medical Superintendent	...	...	...	...	119
Deputy Medical Superintendent	...	...	...	...	5
Assistant Medical Officers	...	...	...	...	15
Pathologist—Southend General Hospital	...	...	...	...	19
Total					158

The space provided for laboratory accommodation in the ultimate hospital extensions will, it is hoped, establish a pathological centre for the Hospital, stimulate the development of the pathological and bacteriological work to a standard equal to that of the other special departments and by providing a complete laboratory service for the Visiting and Resident Staffs still further raise the prestige of the Hospital and contribute in no small measure to the efficiency and thoroughness of the patients' treatment. In view of the absence of a clinical laboratory in the Hospital, consideration is to be given to the possibility of adapting for the purpose a suitable room in which urgent and necessary laboratory investigations can be carried out expeditiously.

SECTION VII.

DISPENSARY.

The issues of dressings, drugs and anæsthetic agents by the Dispensary furnishes a reliable index of the amount of treatment being given at the Hospital:—

Principal Dressings issued during 1938.

Items		January to June	July to December	Totals	Totals 1937
Bandages O.W.	No.	9,917	9,924	19,841	20,012
Other Bandages	No.	496	463	959	1,163
Batiste and Jaconet	Yds.	170	219	398	420
Boric Lint	Lbs.	88	84	172	224
White Lint	Lbs.	545	716	1,261	1,197
Gauze—6 yd.	packets	4,368	4,056	8,424	8,484
Tow	Lbs.	523	640	1,163	973
Grey Wool	Lbs.	731	920	1,651	1,065
White Wool	Lbs.	1,604	2,003	3,607	3,252

Principal Drug Issues including Anæsthetic Agents during 1938.

Items		January to June	July to December	Totals	Totals 1937
Anaesthetic Ether	lbs.	136 $\frac{1}{2}$	140 $\frac{1}{2}$	277	218 $\frac{1}{2}$
Chloroform	lbs.	26 $\frac{1}{4}$	23 $\frac{3}{4}$	50	61
Evipan-Sodium	Ampoules	325	300	625	550
Percaine	Ampoules	96	120	216	180
Liver Extract	Ampoules	129	144	273	712
Insulin	(100 units)	717	508	1,225	1,343
Solganal (Gold)	Injections	300	355	655	568
Methylated Ether	lbs.	304	368	672	708
Methylated Spirit	gls.	285 $\frac{3}{4}$	289 $\frac{1}{2}$	575 $\frac{1}{4}$	509

*Biochemical Examinations conducted in the Dispensary during 1938.**

	1938	1937
Blood Urea Estimations	172	237
Blood Sugar Estimations	89	67
Determination of Blood in fæces	119	181
Gastric Analyses	40	—
Blood Sedimentation Rates	—	—
Totals ...	420	485

Gastric Analyses (Fractional Test Meal Examinations) were undertaken by the Dispenser as from 1st January, 1938, and Blood Sedimentation Rates as from 2nd January, 1939.

* Included in table of Pathological Examinations (Table XIX).

A small room adjoining the Dispensary, previously used as an office, is now utilised as an emergency dressing and drug store as part of the Hospital Air Raids Precaution Scheme. Every inch of available space is thus occupied.

It is anticipated that the inadequacy of the Dispensary accommodation in respect of (a) storage room for bulk quantities of dressings and drugs, (b) separate space for the preparation of aseptic solutions and (c) appropriate space for the storage of inflammable agents and gases, will be rectified by the provision made in the Hospital Extensions Scheme.

SECTION VIII.

In conclusion, I welcome this opportunity of expressing my sense of indebtedness to the Matron for the energy and zeal she has displayed in dealing with the increasing administrative difficulties and nursing problems of the Hospital and for her many acts of personal kindness shown to the patients and staff. The high standard of the work attained has only been made possible by the loyalty, efficiency and unstinted personal service of the Medical and Nursing Staffs and of the personnel of all departments. I also wish to pay tribute to the valuable assistance and co-operation given me by the Master and Matron of Rochford House in connection with the laundry, dietary and other Hospital services.

To the Visiting Staff, to Dr. J. S. Logan, Deputy Medical Officer of Health, and to Dr. H. L. Whitchurch Beach, Medical Superintendent of the Borough Sanatorium, I am very much indebted for advice and assistance in the treatment of patients and staff referred to them. I also desire to place on record my sincere gratitude to Dr. C. Grant Pugh, Medical Officer of Health, for his ever-ready advice and helpful guidance in all matters pertaining to hospital administration.

To His Worship the Mayor, the Chairman and Members of the Health Committee I am particularly grateful for their kind consideration of the problems arising in connection with the accommodation and treatment of the sick and for their untiring efforts to secure the necessary approval of the Hospital Extension Scheme. Their personal interest in the work and welfare of the staff is a source of great satisfaction and is very much appreciated.

SAMUEL CIEMAN,

Medical Superintendent.

APPENDIX.

TABLE I.

SUMMARY OF NURSES' ILLNESSES.

Diseases and Disabilities	Resident	Non-resident	Operations	
			Major	Minor
Diphtheria	5	—	—	—
Scarlet Fever	1	—	—	—
Influenza	6	1	—	—
Chill	10	4	—	—
Tonsillitis	20	3	7	—
Quinsy	1	—	—	—
Laryngitis	4	—	—	—
Sinusitis	3	—	—	—
Otitis Media	3	—	—	1
Fibrositis	10	1	—	—
Cervical Adenitis	1	—	—	—
Septic conditions of skin	14	—	—	9
Paroxysmal Tachycardia	1	—	—	—
Bronchitis	4	1	—	—
Pneumonia	1	—	—	—
Pleurisy	1	1	—	—
Pleural Effusion	1	—	—	—
Pyelitis	3	—	—	2
Appendicitis	3	—	2	—
Peptic Ulcer	1	1	—	—
Dyspepsia	—	1	—	—
Constipation	2	—	—	—
Diarrhoea and Vomiting	8	—	—	—
Jaundice	2	—	—	—
Intestinal Obstruction	1	—	1	—
Colo-vesical fistula	—	1	1	—
Cerebral Tumour	1	—	1*	—
Psychosis	1	—	—	—
Minor Injuries	6	1	—	—
Painful Feet	7	—	—	—
	121	15	12	12

* Operation successfully performed at the Southend General Hospital.

TABLE II.

Table showing how the 4,532 patients treated to a conclusion during the year were originally admitted:—

	Borough	County	Total
Maternity cases	330	164	494
Births	277	123	400
Accidents	135	141	276
Attempted suicides	17	2	19
Transfers from Rochford House ...	196	23	219
Transfers from Southend General Hospital	72	18	90
Transfers from Isolation Hospitals ...	9	1	10
Transfers from Runwell Hospital ...	2	—	2
Transfers from Hospitals of Other Authority	7	2	9
Mental Cases	150	80	230
Other Cases	1948	835	2783
Totals	3143	1389	4532

TABLE III.

Table showing how the 4532 patients were discharged:—

	Borough	County	Total
To own relatives or friends' home ...	2377	1128	3505
To Rochford House	104	22	126
To Hospital or Institution—other Authority	8	1	9
To Infectious Diseases Hospitals ...	20	11	31
To Tuberculosis Sanatoria	—	1	1
To Mental Hospitals—			
Certified under the Lunacy Act ...	70	17	87
As Temporary Patients under the Mental Treatment Act	—	11	11
As Voluntary Patients under the Mental Treatment Act	19	—	19
Deaths	545	198	743
Totals	3143	1389	4532

TABLE IV.
DISEASES TREATED.

Classification						Children under 16 years		Men and Women	
						Disch.	Died	Disch.	Died
A.	Acute Infectious Disease	...	...	...	...	18	1	9	1
B.	Influenza	...	...	...	...	10	1	56	1
C.	Tuberculosis :—								
	(i) Pulmonary	...	...	...	...	2	—	63	22
	(ii) Non-pulmonary	...	...	...	...	2	1	4	1
D.	Malignant Disease	...	...	...	...	—	—	73	84
E.	Rheumatism :—								
	(i) Acute Rheumatism and Chorea	...				23	3	40	1
	(ii) Non-articular Rheumatism	...	...			—	—	4	—
	(iii) Chronic Arthritis	...	...	...	...	—	—	29	4
F.	Venereal Disease	...	...	...	...	—	—	2	—
G.	Puerperal pyrexia—A.	...	...	...	...	—	—	—	—
	B.	...	...	...	...	—	—	6	—
H.	Other diseases and accidents connected with pregnancy and childbirth	...	...	...		—	—	112	5
I.	Mental Diseases :—								
	Senile Dementia	...	...	...	...	—	—	45	22
	Other	...	...	...	...	—	—	158	4
J.	Senile Decay	...	...	...	...	—	—	37	18
K.	Accidental injury and violence	...	...	...	...	92	2	328	30
L.	Diseases of Nervous System	...	...	...	...	33	4	226	109
M.	Diseases of Respiratory System	...	...	...	...	78	9	243	88
N.	Diseases of Circulatory System	...	...	...	...	15	1	259	176
O.	Diseases of Digestive System	...	...	...	...	96	13	386	43
P.	Diseases of Genito-urinary system	...	...	...	...	23	—	143	49
Q.	Diseases of Skin	...	...	...	...	30	—	72	—
R.	Other Diseases	...	...	...	...	94	16	103	34
S.	Mothers and infants discharged from Maternity Wards and not included in the above :—								
	(i) Mothers	...	...	...	...	—	—	489	—
	(ii) Infants	...	...	...	...	386	—	—	—
	Totals	...	...	...	...	902	51	2,887	692

TABLE V.

CLASSIFICATION OF 157 CANCER PATIENTS TREATED
DURING 1938.

Site of Disease	1938				1937	
	Primary	Metas- tases	Total Treated	Deaths	Total Treated	Deaths
Uterus—Cervix ...	7	5	12	4	18	7
Body ...	2	2	4	1	6	3
Ovary ...	2	1	3	1	5	2
Breast ...	8	13	21	8	28	13
Skin ...	2	2	4	1	1	—
Thyroid ...	1	1	2	1	—	—
Oesophagus ...	3	2	5	5	3	2
Stomach ...	14	12	26	16	34	22
Caecum ...	1	1	2	1	1	1
Colon ...	12	7	19	9	30	15
Rectum ...	15	4	19	11	16	7
Pancreas ...	3	1	4	2	6	4
Gall Bladder ...	—	1	1	1	3	2
Kidney ...	1	—	1	—	3	2
Urinary Bladder ...	2	—	2	1	3	2
Prostate ...	7	2	9	5	12	7
Brain ...	—	—	—	—	2	—
Lung or Bronchus ...	2	1	3	2	4	3
Lip ...	1	—	1	—	—	—
Tongue ...	1	2	3	2	4	2
Tonsil ...	—	1	1	1		
Mouth ...	1	3	4	3	3	2
Pharynx ...	2	1	3	3		
Larynx ...	1	2	3	2	3	3
Maxillary Antrim ...	2	1	3	2	1	—
Sarcoma—						
Lympho-sarcoma	1	1	2	2	3	3
(various sites)						
Retro-peritoneal ...	—	—	—	—	1	1
Mediastinal... ..	—	—	—	—	—	—
Other ...	—	—	—	—	2	2
Totals ...	91	66	157	84	192	105

Of the 157 Cancer patients treated during 1938, 53 were admitted after having received previous treatment at other Hospitals.

The Hospital is possessed of every facility for operative treatment and cases requiring radium are treated with radon seeds supplied by the Radium Department of the London Hospital or with radium element obtained on loan from a London house. During 1938, there were 5 cancer cases so treated.

16 Cancer cases received courses of Deep X-ray Therapy at the Southend General Hospital whilst under treatment as In-patients, being conveyed to and from the Hospital by ambulance.

TABLE VI.

TABLE SHOWING THE AGE GROUPS AND SEX OF THE
84 CANCER PATIENTS WHO DIED DURING 1938.

Age Group	25-30	30-35	35-40	40-45	45-50	50-55	55-60
Male ...	—	—	—	—	2	4	3
Female ...	1	—	2	1	2	3	4
Totals ...	1	—	2	1	4	7	7

Age Group	60-65	65-70	70-75	75-80	80-85	85-90	Totals
Male ...	8	8	13	6	1	2	47
Female ...	3	4	8	3	4	2	37
Totals ...	11	12	21	9	5	4	84

TABLE VII.
ANALYSIS OF 1,618 SURGICAL OPERATIONS PERFORMED
IN THE OPERATING THEATRE DURING 1938.

GENERAL	Patients		Nurses		Total
	Major	Minor	Major	Minor	
On skin and superficial structures ...	20	122	—	9	151
„ Arteries, veins and Lymphatics...	11	—	—	—	11
„ Nerves	6	3	—	—	9
„ Bones and Joints (exclusive of Fractures)	21	20	—	—	41
„ Muscles, Tendons and Bursae ...	2	—	—	—	2
„ Skull, Brain and Spine	2	—	—	—	2
„ Face	—	24	—	—	24
„ Mouth and Pharynx	1	—	—	—	1
„ Thyroid	2	—	—	—	2
„ Lymphatic and accessory glands	—	—	—	—	—
„ Breast	9	16	—	—	25
„ Thorax and contents (exclusive of special cases)	7	—	—	—	7
„ Abdominal wall and cavity ...	83	—	1	—	84
„ Stomach and duodenum	31	1	—	—	32
„ Appendix	231	—	2	—	233
„ Intestine	46	15	1	—	62
„ Rectum	28	17	—	—	45
„ Anus	—	7	—	—	7
„ Liver, Gall Bladder and Spleen...	36	—	—	—	36
„ Kidney and Urinary tract ...	65	32	—	2	99
„ Male Generative organs	38	14	—	—	52
„ Female Generative organs ...	71	139	—	—	210
Amputations	17	—	—	—	17
Biopsies	—	6	—	—	6
Bronchographies	—	16	—	—	16
Bronchoscopies	6	—	—	—	6
Totals	733	432	4	11	1,180
SPECIAL					
Obstetric	6	6	—	—	12
Orthopaedic	26	—	—	—	26
Fractures	59	95	—	—	154
Thoracic Surgery	5	—	—	—	5
Ear, Nose and Throat	84	23	7	1	115
Eye	4	—	—	—	4
Dental	—	117	—	—	117
Implantation of Radium or Radon...	4	1	—	—	5
Grand Totals	921	674	11	12	1,618

OPERATIONS:

	<i>Emergency</i>		<i>Remainder</i>		<i>Total</i>
Major	521	...	432	...	953
Minor	—	...	—	...	665
Totals	521	...	432	...	1618
Blood Transfusions	...	...	...	...	11

TABLE VIII.

OPERATIONS PERFORMED IN THEATRE.

	General	Gynaecological and Obstetrics	Orthopaedic	Fractures	Thoracic Surgery	Ear, Nose and Throat	Eye	Dental	Total
By Medical Superintendent	405	118	12	37	—	67	—	74	713
„ Deputy Medical Superintendent	400	54	40	109	—	47	—	37	687
„ Asst. Medical Officers	13	16	—	8	—	—	—	4	41
„ Consulting Surgeons ...	113	—	8	—	5	1	—	—	127
„ Consulting Gynaecological Surgeon and Obstetrician... ..	—	35	—	—	—	—	—	—	35
„ Consulting Orthopaedic & Fracture Surgeon	—	—	9	—	—	—	—	—	9
„ Consulting Ophthalmic Surgeon	—	—	—	—	—	—	4	—	4
„ Consulting Ear, Nose & Throat Surgeon	—	—	—	—	—	—	—	—	—
„ Consulting Dental Sur- geon	—	—	—	—	—	—	—	2	2
Grand Totals ...	931	223	69	154	5	115	4	117	1,618

TABLE IX.

The names and numbers of the operations most frequently performed and classified anatomically are given in the following table:—

On skin and superficial structures (165)—

Toilet and suturing of wounds	34
Tannic Acid treatment of burns and scalds	11
Incisions for abscess, cellulitis, carbuncles and boils ...	68
For septic infection of the hand	19
For sebaceous cyst, lipoma, fibroma, nodule.	25
Skin graft	3
Removal of foreign body	5

On arteries (11)—

Peri-Arterial Sympathectomy	10
Ligature of ruptured epigastric vessels	1

On nerves (9)—

Phrenic Avulsion	1
Exploration of nerves	2
Lumbar Sympathectomy	1
Epidural Block	5

On muscles and tendons (2)—

Lengthening of tendons	1
Suture of tendons	1

On bones and joints (221)—

Transfixion by pin or wire	...	...	...	...	59
Open operation, wiring or plating of fragments	...	...	...	...	22
Bone graft	...	...	...	...	1
Reduction and manipulation of fracture	...	...	...	...	16
Application of plaster of paris	...	...	...	...	99
For Osteomyelitis	...	...	...	...	9
Diaphysectomy	...	...	...	...	1
Sequestrectomy	...	...	...	...	12
Hallux Valgus	...	...	...	...	2

Amputations (17)—

Through femur	...	...	...	...	8
Through leg	...	...	...	...	1
On fingers or toes	...	...	...	...	8

On Thyroid (2)—

Sub-total Thyroidectomy	...	...	...	...	2
-------------------------	-----	-----	-----	-----	---

On Breast (25)—

Radical removal for tumour	...	...	...	...	3
Local removal for tumour	...	...	...	...	5
For abscess	...	...	...	...	16
Plastic operation	...	...	...	...	1

On skull and brain (2)—

Cerebral abscess	...	...	...	...	1
Sub-temporal decompression	...	...	...	...	1

On thorax and contents (12)—

Resection of rib for empyema	...	...	...	...	7
Thorocoplasty (multiple stage)	...	...	...	...	4
Lobectomy	...	...	...	...	1

On abdominal wall (56)—

Herniotomy for Inguinal hernia	...	...	...	...	27
Herniotomy for Inguinal hernia (strangulated)	...	...	...	...	7
Herniotomy for Femoral hernia	...	...	...	...	7
Herniotomy for Femoral hernia (strangulated)	...	...	...	...	4
Herniotomy for Umbilical hernia	...	...	...	...	1
Herniotomy for Umbilical hernia (strangulated)	...	...	...	...	1
Herniotomy for Ventral incisional hernia	...	...	...	...	3
Herniotomy for Ventral incisional hernia (strangulated)	...	...	...	...	2
Herniotomy for Scrotal hernia	...	...	...	...	3
Herniotomy for Scrotal hernia (strangulated)	...	...	...	...	1

On stomach and duodenum (31)—

For peptic ulcer (perforated)	...	...	...	...	12
Partial Gastrectomy	...	...	...	...	2
Gastro-enterostomy	...	...	...	...	7
Rammstedt's Operation	...	...	...	...	1
Gastrostomy	...	...	...	...	8
Section from duodenum for Biopsy	...	...	...	...	1

On appendix (233)—

Appendicectomy	184
Drainage of appendix abscess without appendicectomy	7
Appendicectomy with drainage of abdominal cavity ...	42

On intestine (57)—

Adhesiolysis	10
Anastomosis (various)	3
Enterostomy, colostomy	20
Cæcostomy	7
Enterectomy, colectomy (resection of intestine) ...	5
Exteriorization of colon	3
Crushing of colostomy spur	4
For Meckel's Diverticulum	3
For gall stone impacted in small intestine	1
For Volvulus	1

On rectum and anal canal (52)—

For ischio-rectal abscess	4
For anal fissure or fistula	7
Hæmorrhoids	27½
Sigmoidoscopy	9
Sacro-coccygeal sinus	4
Excision of rectum (perineal)	1

On liver, gall bladder, biliary passages or spleen (36)—

Cholecystectomy	18
Cholecystectomy with appendicectomy	4
Cholecystostomy	9
Cholecysto-gastrostomy	1
Cholecysto-duodenostomy	1
Choledochotomy	1
For liver abscess	1
Splenectomy	1

On kidney, urinary tract and bladder (99)—

Nephrectomy	6
Nephropexy	3
For perinephric abscess	1
Cystoscopy	8
Retrograde pyelography	22
Supra-pubic cystotomy	55
Cauterization of supra-pubic sinus	4

On male Generative organs (52)—

Supra-pubic prostatectomy	27
Orchidopexy	1
Orchidectomy	2
Hydrocele, spermatocele or varicocele	6
Hæmatocele	1
Circumcision	14
External Urethrotomy	1

On female Generative organs (194)—

On ovary and or tube	...	...	...	...	...	15
On ovary and or tube with appendicectomy	...	...	...	...	...	7
For ectopic gestation	...	...	...	...	...	5
For uterine evacuation and or curettage	...	...	...	...	...	52
Intra-uterine glycerine	...	...	...	...	...	5
Hysteropexy with appendicectomy	...	...	...	...	...	8
Colpo-perineorrhaphy	...	...	...	...	...	7
Fothergill's operation	...	...	...	...	...	11
Hysterectomy—						
Total hysterectomy	...	...	...	...	...	7
Sub-total hysterectomy	...	...	...	...	...	8
Vaginal hysterectomy	...	...	...	...	...	1
Cæsarean Section	...	...	...	...	...	6
Various, on vagina or vulva	...	...	...	...	...	11
Surgical induction	...	...	...	...	...	6
Therapeutic abortion	...	...	...	...	...	1
Examination under anæsthetic	...	...	...	...	...	44

On ear, nose and throat (115)—

Tonsillectomy	...	...	...	...	...	84
Tracheotomy	...	...	...	...	...	1
Myringotomy	...	...	...	...	...	9
Schwartz's Mastoidectomy	...	...	...	...	...	20
Radical Mastoidectomy	...	...	...	...	...	1

TABLE X.

RADIOLOGICAL DEPARTMENT.

The total number of radiological examinations made during the year was 5,925 as under:—

	Individual cases examined	Number of films	Examination Screenings	Total Films and Screenings
Hospital patients	807	4,209	180	4,389
Out-patients:—				
Pulmonary Tuberculosis	245	233	967	1,200
Maternity cases	11	22	—	22
Follow-up (Injury)	90	140	—	140
Follow-up (Other)	97	168	6	174
Totals	1,250	4,772	1,153	5,925

TABLE XI.

ANALYSIS OF X-RAY INVESTIGATIONS CARRIED OUT
DURING THE YEAR.

						Injury	Disease	Total
Skull and contents	...	...	...	...	...	56	49	105
Spine	...	...	...	...	...	51	61	112
Ribs and Sternum	...	...	...	...	...	33	3	36
Shoulder	...	...	...	...	...	19	15	34
Humerus	...	...	...	...	...	29	7	36
Elbow	...	...	...	...	...	22	8	30
Radius and Ulna	...	...	...	...	...	29	1	30
Carpus and Metacarpus	...	...	...	...	...	41	14	55
Fingers	...	...	...	...	...	27	27	54
Pelvis	...	...	...	...	...	24	40	64
Hip	...	...	...	...	...	160	47	207
Femur	...	...	...	...	...	112	21	133
Knee	...	...	...	...	...	55	39	94
Tibia and Fibula	...	...	...	...	...	92	27	119
Ankle	...	...	...	...	...	82	24	106
Tarsus and Metatarsus	...	...	...	...	...	27	24	51
Toes	...	...	...	...	...	4	6	10
Nasal and facial bones	...	...	...	...	...	2	1	3
Mandible	...	...	...	...	...	6	9	15
Accessory Sinuses	...	...	...	...	...	—	22	22
Lungs	...	...	...	...	...	—	848	848
Heart, Aorta and Mediastinum	...	...	...	...	...	—	57	57
Oesophagus	...	...	...	...	...	—	4	4
Stomach and duodenum	...	...	...	...	...	—	139	139
Intestine and appendix	...	...	...	...	...	—	64	64
Biliary Passages	...	...	...	...	...	—	105	105
Urinary tract	...	...	...	...	...	—	212	212
Obstetric cases	...	...	...	...	...	—	35	35
Dental	...	...	...	...	...	—	5	5
Foreign bodies	...	...	...	...	...	—	30	30
Totals						871	1,944	2,815

TABLE XII.

SPECIAL METHODS OF INVESTIGATIONS.*

	1938	1937	1936
Barium Swallows	4	3	—
Barium meals	145	162	112
Barium Enemata	44	49	47
Cholecystograms	51	54	68
Pyelograms, urograms—intravenous ...	79	71	71
Pyelograms, urograms—retrograde	†23	†17	12
Bronchograms	†17	†20	20
Lipiodol injections	3	1	8
	366	377	338

* Included in the foregoing analysis of investigations and therefore not additional.

† 23 Retrograde Pyelograms and 17 Bronchograms were taken in the Operating Theatre with the Portable Unit.

	1938	1937	1936
Number of radiograms taken	4,772	3,948	3,595
Average number of radiograms per patient investigated	1.89	1.73	2.5
Average number of investigations per patient	4.7	3.1	3.1
Number of maternity patients X-rayed ...	35	44	37
The largest number of investigations was in connection with injuries to skull, bones and joints	871	877	720
The next largest group of investigations relates to Tuberculosis and other lung conditions	865	658	540

TABLE XIII.
PHYSIO-THERAPY DEPARTMENT.

	Massage	Electro- therapeutic	Light	Infra-red	Radiant Heat	Remedial Exercises	Total	
							1938	1937
Number of In-patients treated	116	21	77	78	40	21	353	230
Number of Out-patients treated	13	—	1	2	—	—	16	20
Totals ...	129	21	78	80	40	21	369	250
Number of In-patient treatments	4409	1208	737	1809	403	2361	10927	7322
Number of Out-patient treatments	122	—	16	17	—	—	155	475
Totals ...	4531	1208	753	1826	403	2361	11082	7797
Number treated ...	129	21	78	80	40	21	369	250
Number of treatments	4531	1208	753	1826	403	2361	11082	7797
Number treated to a conclusion	111	18	58	68	35	21	311	208
Percentage treated to a conclusion							84%	83%

	1938		1937	
Number of Medical cases treated in this department	283	77%	167	67%
Number of Surgical cases treated in this department	34	9%	13	5%
Number of Fracture cases treated in this department	52	14%	70	28%
Total	369		250	

MONTHLY TREATMENT TOTALS.

Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
735	657	707	652	739	879	1099	1249	1167	947	1309	942	11082

TABLE XIV.
MATERNAL MORTALITY.—DELIVERED IN HOSPITAL.

Age	Borough or County	Ante-natal Clinic or Emergency	Maturity in weeks	Gravida	Complication of Labour and/or maternal complication	Method of Delivery	Cause of Death	Births
37	Borough	Emergency	40	2/Para	Severe ante-partum Haemorrhage due to Placenta Praevia	Caesarean Section	Bilateral Lobar Pneumonia (6th day of puerperium)	Stillborn
44	Borough	Emergency	36	2/Para	Severe ante-partum Haemorrhage due to Central Placenta Praevia	Caesarean Section	*Intestinal Obstruction due to Adhesions 11 days after Caesarean Section for Central Placenta Praevia	Alive
37	Borough	Emergency	36	7/Para	Ante and Post-partum Toxaemia associated with ante-partum Haemorrhage	(a) Manual dilatation of Cervix (b) Vaginal Hysterotomy (c) Forceps	*Ante and Post-partum Toxaemia due to Placental Degeneration	Stillborn Macerated
29	Borough	Ante-natal Clinic	40	3/Para	Post-partum Haemorrhage due to Uterine Inertia and Obstetric Shock	Natural Forces	Post-partum Haemorrhage Obstetric Shock	Alive
37	County	Emergency	40	2/Para	Ante-partum Haemorrhage due to Placenta Praevia	Application of Willett's Forceps	Ante-partum Haemorrhage Placenta Praevia	Stillborn

NOT DELIVERED IN HOSPITAL.
Nil.

* Confirmed by post-mortem examination.			
Maternal Mortality Rate—			
Per 100 Booked cases delivered	...	1938	1937
Per 100 Emergency cases delivered	...	0.25%	0.0%
Per 100 Cases delivered	...	9.75%	8.3%
	...	1.1%	0.8%

TABLE XV.

MATERINITY DEPARTMENT—INFANTS' REPORT.

BIRTHS.

	Booked	Emergency	Totals	%
Full time	350	14	364	85%
Premature	28	8	36	8.4%
Stillborn —Premature ...	3	9	12	2.9%
Stillborn—Full time ...	6	10	16	3.7%
Total Births	387	41	428	

Average weight at birth of Infants—Living ... 7 lbs. 4 ozs.

—Stillborn ... 6 lbs. 9 ozs.

Weight of smallest infant born alive	...	...	1 lb.	15 ozs.
--------------------------------------	-----	-----	-------	---------

Weight of largest infant born alive	...	...	11 lbs.	2 ozs.
-------------------------------------	-----	-----	---------	--------

Infants not entirely breast-fed	...	...	...	29
---------------------------------	-----	-----	-----	----

TABLE XVI.

PREMATURE INFANTS' REPORT.

Of the 11 premature infants born alive weighing less than 5 lbs. at birth, 7 were successfully treated, 6 being discharged in a satisfactory condition, the 7th being still in Hospital and making good progress.

		<i>Birth weight.</i>			<i>Weight on discharge.</i>
1	...	4 lbs. 8 ozs.	...	5 lbs. 2 ozs.	
2	...	4 lbs. 2 ozs.	...	5 lbs. 1 oz.	
3	...	3 lbs. 10 ozs.	...	5 lbs.	
4	...	4 lbs. 2 ozs.	...	5 lbs. 2 ozs.	
5	...	2 lbs. 9 ozs.	...	5 lbs. 1½ ozs.	
6	...	3 lbs. 5 ozs.	...	5 lbs. 2½ ozs.	
7	...	3 lbs. 2 ozs.	...	Still in Hospital.	

TABLE XVII.
STILLBIRTHS.
(Details of the 28 Stillbirths)

Maternal Complications	Method of Delivery	Infant	Cause of Foetal Death	Boro' or County
<i>Emergencies (19)—</i>				
Placenta Praevia ...	Caesarean Section	F.T.	Maternal condition and complication of labour	B.
Transverse Lie ...	Craniotomy	F.T.	Complication of labour	B.
Ante-partum Haemorrhage	Natural Forces	P.	Maternal condition	C.
Previous eclampsia	Natural Forces	P.M.	Maternal condition	B.
Ante-partum Haemorrhage	Bi-polar version and Willett's Forceps	F.T.	Maternal condition and complication of labour	C.
Pneumonia and Chronic Nephritis	Natural Forces	P.M.	Maternal condition	C.
Placenta Praevia	Natural Forces	F.T.	Maternal condition	B.
Ante-partum Haemorrhage	Willett's Forceps	P.	Maternal condition and complication of labour	B.
Breech. Foetal head undelivered on admission	Natural Forces	F.T.	Complication of labour	C.
Impacted shoulders	Bilateral cleidotomy	F.T.	Complication of labour	C.
Albuminuria	Natural Forces	P.M.	Maternal condition	B.
Ante-partum Haemorrhage	Natural Forces	F.T.	Maternal condition	C.
Prolapsed cord	Early rupture of membranes and Natural forces	F.T.	Complication of labour	B.
Albuminuria and Ante-partum haemorrhage	Natural Forces	F.T.	Maternal condition	B.
Placenta Praevia	Willett's Forceps	F.T.	Maternal condition and complication of labour	C.
Albuminuria and Ante-partum haemorrhage	Natural Forces	P.	Maternal condition	C.
Toxaemia	Forceps after Vaginal hysterotomy	P.M.	Maternal condition	B.
Ante-partum haemorrhage	Natural Forces	P.	Anencephaly	B.
B.B.A. (in ambulance)	Natural Forces	P.M.	Placental degeneration	C.
<i>Ante-natal cases (9)—</i>				
Syphilitic Infection	Natural Forces	F.T.	Maternal condition	B.
Ante-partum haemorrhage	Natural Forces	P.	Maternal condition	B.
Complicated breech	Manual of complicated breech	F.T.	Complication of labour	B.
Complicated breech	Manual of complicated breech	F.T.	Complication of labour	B.
None apparent	Natural Forces	F.T.M.	Placental degeneration	C.
Ante-partum Haemorrhage	Natural Forces	P.	Maternal condition	B.
Ante-partum Haemorrhage	Natural Forces	P.	Maternal condition	C.
Complicated breech	Manual of complicated breech	F.T.	Complication of labour	B.
None apparent	Low Forceps	F.T.M.	Unknown	B.

No Post-mortems obtained.

F.T.	..	Full term.	B.B.A.	...	Born before arrival.
F.T.M.	...	Full term macerated.	B.	...	Borough.
P.	...	Premature.	C.	...	County.
P.M.	...	Premature macerated.			

SUMMARY OF CAUSES OF 28 STILLBIRTHS.

Cause of Stillbirth					Ante-natal Clinic	Emergency	Total
Maternal conditions	...	...	...		4	13	17
Complication of labour		...	...		3	4	7
Foetal conditions	...	...	...		—	1	1
Placental conditions	...	...	...		1	1	2
Unknown ...	...	...	...	...	1	—	1
Totals				...	9	19	28

TABLE XVIII.
DETAILS OF FIFTEEN DEATHS OF INFANTS WITHIN
FOUR WEEKS OF BIRTH.

Cause of Death	Maternal Complication	Method of Delivery	Weight at Birth	Age at Death	Borough or County
<i>Emergencies</i> (4) :— Asphyxia Pallida Prematurity Atelectasis Achondroplasia	Placenta Praevia None None Acute Hydramnios	Natural forces Natural forces Natural forces Drew Smythe Induction and Forceps	lbs. ozs. 4 1 1 15 9 0 5 8	18 hours 3 hours 2 days 10 minutes	Borough Borough Borough County
<i>Booked</i> (11) :— Premature Twin Premature Twin Prematurity Maternal condition *Hydrocephalus *Prematurity *Partial Atelectasis Congenital Hypertrophic. Pyloric Stenosis Melaena Neonatorum *Intra-cranial Haemorrhage *Generalized Oedema	None None None Toxaemia Albuminuria None Elderly Multipara None None None Albuminuria	Natural forces Natural forces Natural forces Natural forces Natural forces Natural forces Natural forces Natural forces Natural forces Natural forces Natural forces Natural forces	4 8 4 11 3 10 5 12 6 3 4 0 5 0 6 8 6 4 7 6 6 9	26 hours 25 days 24 days 21 days 2 days 4 hours 3 days 24 days 5 days 2 days 75 minutes	County County Borough County Borough Borough Borough County Borough Borough Borough

* Post-mortem examination performed.

SUMMARY OF CAUSES OF DEATH WITHIN
FOUR WEEKS OF BIRTH.

	Ante-natal Clinic	Emergency	Total
Prematurity	4	1	5
Foetal conditions	6	3	9
Maternal condition	1	—	1
Totals	11	4	15

INFANTILE MORTALITY RATE.

	1938	1937	1936
Of 428 infants born 28 were stillborn and 15 died	10.0%	6.1%	5.3%
Of 400 infants born alive, 15 died within 4 weeks of birth	3.7%	2.4%	1.3%
Of 11 premature infants born alive, 4 died within 4 weeks of birth (weighing less than 5 lbs.) ...	36.3%	53.8%	21.4%
Of one pair of twins born, nil were stillborn	nil.	12.5%	10.0%

TABLE XIX.
PATHOLOGY.
Analysis of Examinations made during the year.

Examinations	Carried out at			
	Southend General Hospital	Seaman's Hospital, Greenwich	Borough Sanatorium	Southend Municipal Hospital
Various	855	6	1	—
Wassermann Reaction ... (Blood or C.S.F.)	—	209	—	—
Sputa for Tubercle Bacilli ...	—	—	165	—
Ear, Nose and Throat Swab for B. Diphtheria	—	—	146	—
Swabs and smears for Gonococci ...	—	—	31	—
Widal reactions	—	—	9	—
Gastric Analyses	—	—	—	40
Blood—Biochemistry	—	—	—	261
Faeces—occult blood	—	—	—	119
Post-mortems	—	—	—	158
Totals ...	855	215	352	578

Grand Totals	...	...	1938	...	1937
			2000	...	2091



ANNUAL REPORT

OF THE

Medical Superintendent

OF THE

BOROUGH SANATORIUM

For the Year 1938.

STAFF.

RESIDENT—

Medical Superintendent—HAROLD LESLIE WHITCHURCH BEACH,
M.B., B.S., M.R.C.S., L.R.C.P., D.P.H.

NON-RESIDENT—

Tuberculosis Officer—GEORGE NORMAN MEACHEN, M.D.,
M.R.C.P.

NURSING STAFF—

Matron—Miss F. Midgley.

Assistant Matron and Sister Tutor (combined post) 1;
Night Superintendent, 1; Ward Sisters, 3; Staff
Nurses, 13; Probationer Nurses, 10.

Consultant Medical and Surgical Staff.

Members of the consultant staff attend at the request of the Medical Superintendent and the following is a list of attendances made by them during the year:—

Physician	...	Dr. Sleigh Johnson	4 attendances
General Surgeon	...	Mr. R. H. Campbell	3 attendances
Orthopædic Surgeon		Mr. B. Whitchurch Howell	2 attendances
Ophthalmologist	...	Mr. D. D. Evans	2 attendances

Nursing Staff.

Great difficulty is still being experienced by the Matron in appointing suitable applicants to the nursing staff. No increase in the number of the nursing staff has been authorised during the year under report.

Examination Results.

1. *Test Educational Examination.*—By arrangement with the Municipal College all probationer nurses on appointment to the staff attend daily a course of instruction especially prescribed for the requirements of the Test Educational Examination of the General Nursing Council of England and Wales.

The results of the two examinations held during the year are as follows:—

Date of Examination	Passed	Referred	Failed	Total
March	1	1	—	2
May	1	—	1	2
Total	2	1	1	4

2. *Preliminary State Examination.*—The five candidates for the May examination were the first group of probationer nurses undergoing training at the Borough Sanatorium to enter for the Preliminary State Examination. The following table gives the results of this examination:—

Date of Examination	Passed	Failed	Total
May 	3	2	5
October 	—	1	1
Total 	3	3	6

It will be noticed that in both the Test Educational and the Preliminary State Examinations 50% only of the candidates were successful.

During the year no member of the nursing Staff entered for the Final State Examination (Fever Section) as the period of training of the successful candidates in the May Preliminary State Examination will not be completed until May, 1939.

Accommodation.

There has been no increase in the accommodation for in-patients during the year. The installation of electrical heating by radiator wall panels in the four pavilion wards, which was commenced in 1937, was completed this year. The temperature of each ward is now under sealed thermostatic control. This much-needed augmentation of ward heating has resulted in increased comfort of the patients. The need for increased accommodation for isolation of certain types of mixed infection and different types of zymotic disease, still remains a matter of extreme urgency. With only the eight side wards which are available for such cases, successful ward administration is rendered extremely difficult, and can only be surmounted on occasions by nursing such cases as mentioned in the main ward by barrier isolation, a method which is not ideal.

In November, alterations and additions to the "Old Nurses Home" were commenced. When this work is completed there will be a new laboratory, and consulting, examination and waiting-rooms for patients attending the V.D. department. These improvements will, it is hoped, enable the important work in this department of the Hospital to be carried on under better conditions, both from the point of view of the patients and medical staff.

Air Raid Precautions.

In the September crisis precautions against possible attack from the air were taken and these can be described as follows:—

- (1) Provision of civilian respirator for each member of the nursing and domestic staff and for each patient. Each patient

over the age of two years was measured for and supplied with a respirator of the civilian type. These respirators were stored in the respective wards.

- (2) Provision of a gas-proof room in each ward for the use of children under 2 years of age who were too small to wear a respirator.
- (3) Provision for emergency lighting for each ward, Nurses' Home, and Administration Block.
- (4) Storage of provisions in each ward, e.g., cereals, sugar, tinned fruit, etc.
- (5) Protection of windows against possible splintering and escape of light.
- (6) Provision of means for extinguishing incendiary bombs in all buildings.
- (7) Storage of dressings, etc., for first aid treatment in each ward.
- (8) Work was commenced on the construction of trenches.

Clinical Statistics for the year 1938.

The number of patients under treatment during the year was 450. The total is 5 more than the corresponding figure for 1937. The details as regards the number of patients admitted to, and discharged from, hospital, together with the fatal cases, are represented in tabular form as follows:—

	Scarlet Fever	Diphtheria	Diphtheria Carriers	Measles	Chicken Pox	Whooping Cough	Typhoid Fever	Paratyphoid B. Fever	Dysentery	Polio-encephalitis	Acute Anterior Poliomyelitis	Meningococcal Meningitis	Tuberculous Meningitis	Ophthalmia Neonatorum	Other Diseases	Pulmonary Tuberculosis	Totals
Remaining on 1st January	32	26	—	—	—	—	—	1	—	—	—	—	—	—	—	16	75
Admitted during the year	151	96	10	24	2	4	8	2	4	2	5	1	1	3	19	43	375
Under treatment during the year	183	122	10	24	2	4	8	3	4	2	5	1	1	3	19	59	450
Died during the year ...	1	4	—	1	—	—	2	—	—	1	—	1	1	—	—	22	33
Discharged during the year	157	87	10	22	2	2	1	3	4	1	1	—	—	2	16	23	333
Transferred to other Hospitals	1	6	—	1	—	—	—	—	—	—	3	—	—	—	1	1	13
Remaining on 31st December	22	25	—	—	—	2	5	—	—	—	1	—	—	1	2	13	71

Included in the admission are 16 cases of diphtheria, 5 cases of scarlet fever and 3 cases of typhoid fever which were removed from the Southend Municipal Hospital in the area of the Rochford Rural District.

The following table shows the number of cases of Scarlet Fever and Diphtheria admitted to hospital during each of the previous ten years:—

Year		1938	1937	1936	1935	1934	1933	1932	1931	1930	1929
Scarlet Fever	...	151	168	210	208	306	277	117	154	193	181
Diphtheria	...	96	102	52	125	154	77	85	89	90	65

Fatal Cases.

The total number of deaths occurring during the year, excluding those due to pulmonary tuberculosis, was eleven, and these may be summarised as follows:—

Diphtheria	...	...	...	4	Meningococcal Meningitis	1
Typhoid Fever	...	...	...	2	Tuberculous Meningitis	... 1
Scarlet Fever	...	...	...	1	Acute Polio-Encephalitis	... 1
Measles	...	...	...	1		

Further details of these fatal cases are contained in the following report under the appropriate headings.

Scarlet Fever.

The number of cases admitted during the year was 151, as compared with 168 cases during the previous year. Included in this total are five cases admitted from the Southend Municipal Hospital. Thirty-two patients were in residence at the beginning of the year, making a total of 183 cases which were under treatment during the year. Of these, 157 were discharged, one was transferred to the Southend Municipal Hospital, one died and 22 remained under treatment at the end of the year.

The following table illustrates the incidence of scarlet fever in relation to sex and age groups, with the frequency of the most common complications:—

Age Group	Sex		Adenitis	Otorrhoea	Rhinorrhoea	Albuminuria	Secondary Tonsillitis	Rheumatism
	M.	F.						
0—5	5	21	2	3	3	3	3	—
5—10	39	35	8	11	6	7	5	1
10—15	23	6	3	4	4	1	—	1
15—20	4	6	—	2	—	—	—	—
20—30	—	3	—	—	—	1	—	—
30—40	2	7	—	—	—	1	—	—
TOTAL	73	78	13 (8.6%)	20 (13.2%)	13 (8.6%)	13 (8.6%)	8 (5.3%)	2 (1.3%)

The youngest patient to be admitted suffering from scarlet fever was eighteen months old and the oldest was 40 years of age. Sixty-nine cases, or 45% of the total number admitted developed complications. The outbreak of scarlet fever in a local orphanage which was recorded in last year's report as commencing on December 29th, 1937, continued until May, a total of 28 cases being admitted to the hospital, whilst a number of suspected cases in which the diagnosis was doubtful were isolated in the institution. In one of the private boarding schools an outbreak occurred in May, six boarders being affected.

Throughout the year the prevalent type of scarlet fever continued to be mild, although several cases admitted to the Sanatorium were distinguished by the fairly severe degree of toxæmia accompanying the exanthem, and there were two cases in which the disease was of the septic type.

There were six cases of surgical scarlet fever admitted during the year and these can be briefly described as follows:—

Sex	Age	Focus of Infection	Remarks
F.	3 yrs.	Fauces	Tonsillectomy performed seven days before onset of disease.
M.	6 yrs.	Furuncle, leg	Fauces healthy. Acute Glomerulonephritis on ninth day of illness.
F.	8 yrs.	Recent wound R. knee and leg	Fauces healthy on admission. This was the second attack of scarlet fever in eleven months.
M.	15 yrs.	R. Hallux	Removal of toe nail of R. hallux twelve days before onset of disease. Fauces healthy.
F.	16 yrs.	Fauces	Tonsillectomy performed three days before onset of disease. Developed bilateral otorrhoea.
M.	31 yrs.	Septic finger	Septic finger and acute ascending lymphangitis on admission. Patient was a glass cutter by trade.

“ Relapses ” occurred in three cases and there were two return cases during the year. These figures compare favourably with similar figures of other isolation hospitals. There was one fatal case of scarlet fever included in the total of 151 patients admitted in the year. This patient was a boy, aged 6 years, who was admitted on the third day of the disease with a fairly severe attack of scarlet fever. He received 3,000 units of antistreptococcal serum (antiscarlatinal strain) by intramuscular injection on admission. The patient developed a mild bronchitis on the following day. Albuminuria occurred on the tenth day of the illness. This was rapidly followed by other symptoms and signs of acute glomerulo-nephritis and despite intensive treatment for his renal condition, acute uræmia developed and the boy died on the 16th day of his illness.

Duration of stay in hospital.

The average duration of residence in hospital is shewn as follows:—Of all cases the average duration was 39.6 days. The similar figure for the years 1937, 1936 and 1935 was 34.5, 42.4 and 40.5 days respectively. It should be noted that the following three cases were each in residence over 100 days:—

- M. 6 yrs. Residence 253 days—due to presence of pemphigus vulgaris.
- F. 6 yrs. Residence 147 days—due to presence of chronic rhinorrhœa.
- F. 2½ yrs. Residence 106 days—due to presence of chronic pyelitis.

If these cases are excluded from the total, the average duration of the remaining patients is reduced to 35 days.

The average duration of residence of cases with normal convalescence was 29.2 days, whilst in cases developing complications the average stay was 53.1 days.

Treatment.

1. *Specific.*—Antiscarlatinal serum was administered in doses varying between 3,000 and 15,000 units to 111 patients or 73% of all cases admitted. The serum was administered by the intramuscular route in all cases. The routine dose given to normal cases on admission is 3,000 units. Together with the anti-streptococcal serum a dose of 1,000 units of diphtheria antitoxin was also given as a prophylactic dose. No case of diphtheria occurred in the scarlet fever wards during the year.

2. *Chemotherapeutic.*—Drugs of the sulphanilamide group were prescribed for all patients, children and adults, in whom complications of a septic character developed, such as tonsillar adenitis, otitis media, rhinorrhœa and secondary tonsillitis. There was the requisite response to the administration of this group of drugs in the majority of cases, but in others the patients appeared to be resistant to their effect. The complication which appeared to be most commonly unaffected by sulphanilamide was rhinorrhœa, in some cases no improvement resulting from the administration of two or three doses. A small number of patients with otorrhœa also shewed no response to this drug. It may be possible that sulphanilamide may have a specific effect on certain strains of hæmolytic streptococci and not on others.

The dosage of sulphanilamide employed in children under 14 years of age was 1 gramme daily for four days, and in patients above this age double this dose was prescribed and administered for a similar period. During this period, eggs, saline aperients, as being substances having a high sulphur content, were not given to the patient. Only two cases of scarlet fever out of the large number who had received sulphanilamide shewed any toxic effect from this drug. One child, a boy aged 12 years, after a total but divided dose of 2½ grammes, complained of malaise and abdominal pain and had diarrhœa for 24 hours. No other causal agent could be found to account for these symptoms, which subsided rapidly after withdrawal of the drug. The second case was also a boy of 6 years,

who, during the fourth week of convalescence from scarlet fever developed an extensive pemphigus vulgaris. On the assumption that this superadded infection was due to a low grade of streptococcus, the usual doses of sulphanilamide was given. Within two days this patient had a definite albuminuria which subsided in seven days. There was no other sign of acute glomerulonephritis, and there was no recurrence of the proteinuria. This is a recognised toxic effect of sulphanilamide therapy as are sulphhæmoglobinæmia, peripheral neuritis, and toxic rashes, but none of these latter effects was seen in the large number of patients receiving this form of chemotherapy.

Experience during the year has confirmed the view expressed in last year's report as to the need for more adequate accommodation by way of single-bedded or double-bedded wards being available for the treatment, not only of patients suffering from Scarlet Fever and some other co-existent infectious disease, but also of scarlatinal patients who develop rhinorrhœa, otorrhœa, and similar complications. In recent years, it has been recognised that there are various strains of the hæmolytic streptococcus, the causal organism of Scarlet Fever, a fact which possibly accounts for some of the cases of so-called relapse and indicates the advisability of segregating certain of the patients. The many administrative difficulties which arise in the hospital treatment of Scarlet Fever would be materially lessened if a greater proportion of the patients could be treated in small wards, and I would again urge the desirability of the provision as soon as possible of a new block of several small wards accommodating 1, 2, and 4 patients respectively.

Diphtheria.

The number of patients admitted during the year was 106, as compared with 102, and 52, for 1937 and 1936 respectively. On January 1st, 26 patients were in residence, and therefore, the total number under treatment during the year was 132. This total includes ten carriers of the corynebacterium diphtheria and 16 cases of diphtheria admitted from the Southend Municipal Hospital. 97 patients were discharged cured, and 6 were transferred to the Southend Municipal Hospital. 4 cases terminated fatally, and 25 remained under treatment at the end of the year.

The cases of diphtheria admitted during the year can be classified as follows:—

Type of Disease	No. of cases	% Total	No. of Deaths	Fatality Rate
Faucial	73	68.8	3	4.1%
Nasal	18	16.9	—	—
Laryngeal and faucial	5	4.7	1	20.0%
Carriers	10	9.4	—	—

The cases of faucial diphtheria can be sub-divided according to the severity of the disease:—

Mild	...	...	25 cases or 34.2%
Moderate	...	...	21 cases or 28.7%
Severe	...	...	27 cases or 36.9%

The following table shows the incidence in relation to sex, age and the most common complications that occurred among the 102 cases which recovered:—

Age Group	Sex		Toxic Myocarditis	Paralysis of Palate	Ocular Paralysis	Secondary Tonsillitis	Temporary Carrier
	M.	F.					
0—5	15	5	—	1	—	1	8
5—10	26	15	1	3	2	4	10
10—15	7	8	—	4	1	1	3
15—20	3	8	—	1	2	3	1
20—25	3	7	1	2	—	1	2
25—50	1	4	—	2	1	2	—
Totals	55	47	2 (1.9%)	13 (12.7%)	6 (5.8%)	12 (11.7%)	24 (23.5%)

The youngest patient to be admitted was a baby 8 weeks old who was proved to be a virulent nasal carrier. The oldest patient was a woman of 50 years, who, on admission was suffering from a severe form of faucial diphtheria and in addition had hyperpiesis and chronic myocardial degeneration. This patient made an uninterrupted recovery. It is interesting to note that the grandchild of this patient, who lived with her, was admitted at the same time with nasal diphtheria, and doubtless was the source of infection.

The high carrier rate was responsible for the prolonged residence in hospital of these patients. The organisms from seven of them proved to be of virulent character and six were transferred to the Southend Municipal Hospital for tonsillectomy and adenoidectomy. The carrier state of the other seventeen patients was successfully treated by various local applications, and these were discharged from hospital after varying periods in a non-infectious condition.

The duration of illness on the day of admission to hospital in all cases of faucial and laryngeal diphtheria can be represented as follows:—

Day of Illness	1st	2nd	3rd	4th	5th	Later
Number of cases	1	14	26	20	6	11
% of the total	1.2	17.9	33.3	25.6	7.6	14.1

Two cases only of the 15 admitted on either the first or second day of the disease developed complications, and in both patients this was a palatal paralysis of a mild character and of temporary duration. Four cases admitted on the third day developed complications, and from this day onwards there is a steep rise in their incidence. Great responsibility falls upon the parents of children suffering from this disease. It has been forcibly thrust upon one's observation on several occasions that parental ignorance of the dangers of a sore throat occurring in a child has been the cause of delay in sending for medical assistance, resulting in the child having a severe and protracted illness, and in two cases this year of untimely death. These unnecessary and tragic occurrences could have been avoided if specific treatment could have been administered at an earlier date, or if the parents had availed themselves of the opportunity of antidiphtheritic immunisation for their children.

Laryngeal Diphtheria.

No case of uncomplicated laryngeal diphtheria was admitted during the year, as the fauces were involved in the diphtheritic process in all cases. Particulars of the five cases under treatment in the year can be seen from the following table:—

Sex	Age	Day of Illness	Dose of Serum	Time of Tracheotomy	Remarks	Result	Duration of Residence
F.	1 $\frac{2}{12}$	5th	40,000 Units	3 hrs. later	Exudate also on both tonsils	Cure	72 days
F.	2	7th	40,000 Units	Not performed	Exudate also on both tonsils	Cure	68 days
M.	4 $\frac{1}{2}$	2nd	96,000 Units	24 hrs. later	Exudate also on one tonsil	Cure	74 days
M.	6	4th	40,000 Units	24 hrs. later	Exudate also on both tonsils	Cure	67 days
M.	5 $\frac{1}{2}$	8th	104,000 Units	48 hrs. later	Nasopharynx also involved, with severe toxæmia	Death	4 days

Fatal Cases.

In addition to the fatal case of laryngeal and faucial diphtheria above referred to, three other deaths occurred during the year. All had extensive membrane formation on the fauces, with involvement of the nasopharynx, and severe diphtheritic toxæmia. In the last case reported in the following table, the child's parents did not obtain medical advice as the illness was thought to be due to mumps.

Details of the three fatal cases can be seen from the following:

Sex	Age	Day of Illness	Dose and Route of Serum given	Cause of Death	Date of Death
M.	4	3rd	20,000 Units I.V. 60,000 Units I.M.	— Toxaemia	— 10 hrs. after admission
M.	5	3rd	40,000 Units I.M.	Toxaemia	10 hrs. after admission
F.	9	4th	90,000 Units I.V. 40,000 Units I.M.	Peripheral Circulatory Failure	48 hrs. after admission

(I.V. = Intravenously; I.M. = Intramuscularly.)

Treatment.

All cases of diphtheria received antitoxin by the intramuscular route, the maximum single dose being 60,000 units. The total maximum dose of antitoxin given to any one case was 140,000 units, of which 80,000 units were given intravenously. Besides this case five other patients received antitoxin by this route. On the assumption that a certain degree of the toxæmic manifestations occurring in severe cases of faucial diphtheria—e.g., œdema of fauces uvula, cutaneous petechiæ and pallor, may be in part due to a concomitant streptococcal infection, all cases exhibiting these signs received in addition to the diphtheria antitoxin, an intramuscular injection of streptococcal antitoxin in a dosage varying between 1,500 and 3,000 units. The effects of this treatment have justified this procedure. It has been observed that the occurrence of nervous and myocardial complications has been low, where it would otherwise have been expected to be high and the complications themselves to have been of a dangerous character. This adjuvant treatment will be continued in all cases of severe faucial and nasopharyngeal diphtheria.

Duration of Residence.

The average duration of cases discharged during the year was 65.8 days, an increase of 11.6 days on the corresponding figure for 1937. In 1936 and 1935 the average length of period in hospital was 59.1 and 57.7 days respectively. The average duration of residence in hospital for uncomplicated cases was 53.0 days and in patients developing complications the corresponding figure was 78.4 days.

Diseases of the Central Nervous System.

1. Acute Anterior Poliomyelitis and Polioencephalitis.

At the time when there was a widespread epidemic of acute anterior poliomyelitis in England, and when the period of maximum incidence of the disease was reached in the S.E. of England, three cases only occurred in the County Borough of Southend-on-Sea, and were admitted to the Sanatorium. Two other cases were in residence during the year, but these can be regarded as cases representing the sporadic type of the disease. It is interesting to note that the first case of infantile paralysis to occur was a child

aged seven months, who on July 15th was taken to a village in North Essex which was affected by an extensive epidemic of this disease. This infant stayed with her parents in a house next to one from which two children were removed with anterior poliomyelitis, and in which lived a girl of 15 who was considered to be a possible carrier of the disease. On August 2nd, after a stay of 18 days, the child was brought back to her home in Leigh, apparently in normal health. The date of onset of the disease in this patient was August 12th, i.e. 10 days after her return. The second and third cases to occur were two brothers, aged 9 and 11 years, who were cousins of the first case just described, and who had visited her daily from August 4th—6th inclusive, i.e. the 2nd—5th days after the infant's return to her home, and at a period during which she was presumably incubating the disease. These two boys left the district on August 7th for a camping holiday in Norfolk. These two boys remained quite well until August 18th when the elder brother was first taken ill. The whole family returned home two days later and on the 21st August the younger boy was noticed to be unwell. The boys were both taken to the Southend General Hospital and transferred to the Borough Sanatorium the next day.

The fourth case was a boy 8 years old who had arrived in the district on holiday and was taken ill the day after his arrival. He was removed to Hospital on the third day of his illness.

The last case of infantile paralysis to occur in the Borough was a girl aged 12 years, who was a boarder in one of the schools in the district. She was admitted to the Sanatorium on December 16th with the history that twelve days previously she had a short febrile illness for which she was confined to bed. She was allowed out of bed in three days, when she was apparently well but five days later she was noticed to be limping. This was the only case of acute poliomyelitis to occur in the school, in which a very wise precaution is taken—daily temperatures of all the boarders are taken and any girl showing pyrexia is isolated immediately. This procedure may account for the absence of any other cases of the disease in this school.

The details of these five cases can be summarised as follows:—

Sex	Age	Day of Disease	Form of Paralysis on Admission	Residence in Hospital
F.	$7\frac{1}{2}$	17th	Left sterno-mastoid, flaccid paralysis of left leg.	42 days
M.	11 yrs.	3rd	Flexors of hip, knee, and ankle of left leg.	40 days
M.	9 yrs.	3rd	Nil. Marked meningeal involvement.	39 days
M.	8 yrs.	3rd	Deltoid: biceps: triceps and flexors of wrist on left side.	29 days
F.	12 yrs.	13th	Extensors of knee; flexors and extensors of ankle on right side.	27 days

As recorded in the third case there was clinical evidence of severe meningeal involvement. Commonly, this type of case is followed by extensive paralysis. It was because of this possibility that anti-poliomyelitis horse serum was given intramuscularly to this patient. This serum treatment is regarded by some authorities as being without effect, but in this boy the signs of acute meningeal irritation subsided and were not succeeded by any form of paresis.

Two cases of acute polio-encephalitis were admitted to the Sanatorium during the year. As both these cases present certain interesting features they will be described in detail.

The first case was a boy, 8 years old, who lived in the district, and, as far as could be ascertained, had not been anywhere where he may have become infected. He was admitted to Hospital on September 1st with a history that he had malaise and complained of headache three days previously. This was followed the next day by ataxia, and a few hours prior to removal to hospital he had a convulsion. On admission there was a definite meningeal irritation as evidenced by cervical rigidity, bilateral Kernig's, Brudinski's, and Brabinski's signs, with increased reflexes. There was in addition some irritation of the left cranial seventh nerve nucleus as there was spasm of the facial muscles on that side, and paralysis of the left abducens nerve. Lumbar puncture was performed daily for the succeeding five days. Clinical signs which developed subsequently were a transient lateral nystagmus, a temporary vesical paralysis, and a slight paresis of the right quadriceps extensor group of muscles. These last two forms of paresis indicated an extension of the inflammatory process from the cerebral to the spinal portion of the central nervous system, but as these extensions occurred on the 10th and 13th days respectively and as they were both of a temporary duration it can be presumed that either the virus by then had lost its virulence or the immunity of the patient had increased to such a degree as to prevent a permanent lesion of the anterior horn cells of the spinal cord. This patient was discharged from Hospital after 55 days stay. At this time no abnormality of either the muscular or central nervous systems could be detected by clinical examination.

The second case of acute polio-encephalitis occurred in a girl aged 12 years, who, 36 hours before admission had complained of malaise and who, within the preceding two hours, had nasal regurgitation of fluids. Examination revealed the following lesions:

Left trigeminal nerve—paresis only.

Left facial nerve—definite supranuclear paralysis.

Right and left glossopharyngeal and vagus—definite paralysis.

Right and left spinal accessory nerve—definite paralysis.

Lumbar puncture was performed; the macroscopic appearance of the cerebrospinal fluid was normal. Nine hours after admission dyspnoea was reported and by this time the child was cyanosed and there was shallow upper thoracic respiration only. The diaphragm was paralysed and there was evidence of a rapidly failing circulation. Cardiac and respiratory stimulants were given hypodermically and artificial respiration was commenced. The patient was transferred to the Drinker's Respirator within about ten minutes. The pulse continued to fail and the patient died 20 minutes after removal to the respirator.

The cause of death in this case was a paralysis of the cardiac and respiratory centres of the medulla oblongata, due to a rapidly descending central paralysis.

There is a distinct similarity between the last two cases, in that the localisation of the infective process was the upper portion of the central nervous system. The reason why the neurotropic virus should select the brain in certain cases and the spinal cord in others is not completely understood. It has been suggested that in poli-encephalitis the portal of entry of the virus is the upper part of the nasopharynx from whence it is conveyed by the nasal nerves through the cribriform plate of the ethmoid to the olfactory bulb and from here to the brain along the olfactory nerve tracks; whereas in the spinal type of the disease, poliomyelitis, the virus is supposedly absorbed from the intestinal mucosa after it has been ingested, and taken direct to the spinal cord by the visceral nerves. This is an interesting supposition and would account for the apparently anomalous fact that the virus attacks the upper part in some cases, and the lower part of the central nervous system in others.

2. *Meningococcal Meningitis.* Only one case of this disease was under treatment during the year, particulars of this case being as under:—

A boy of 15 years of age, was admitted on the third day of his illness, having two days previously complained of headache and on the following day had pain in his neck, photophobia, diplopia, and vomiting. On admission there was evidence of severe meningeal irritation and toxæmia. The main features of this case can be seen from the following table:—

Day of Disease	Fluid removed by L.P.	Cell Content of C.S.F.	Dosage of Meningococcal Antitoxin			Dosage of Sulphanilamide	Organisms in C.S.F.
			I.T.	I.V.	I.M.		
4th	30cc.	9,000 per cmm.	Units 5,000	Units 5,000	Units 10,000	1 gm. g.h.	+
5th	10cc.	13,000 per cmm.	5,000	5,000	—	1 gm. g.h.	—
	40cc.	15,000 per cmm.	5,000	—	—	1 gm. g.h.	—
6th	50cc.	—	30,000	—	—	1 gm. g.h.	—
	30cc.	17,000 per cmm.	10,000	—	10,000	1 gm. g.h.	+
7th	5cc.	19,000 per cmm.	—	10,000	—	1 gm. g.h.	+

L.P. = lumbar puncture. I.T. = intrathecally. I.V. = Intravenously.
I.M. = Intramuscularly.

On the fifth and sixth day a soluble sulphanilamide was given by intramuscular injection. A total dosage of 95,000 units of polyvalent meningococcal antitoxin was administered, 20 c.c. of soluble sulphanilamide, and 16 gms. or 120 grs. were given by the oral route. Despite this intense serological treatment and chemotherapy there was a rapid deterioration in both the local and general states

of this patient. He died on the 7th day of his disease, four days after admission to hospital. This type of case, one of fulminating meningococcal meningitis, is fortunately uncommon.

3. *Tuberculous Meningitis.* One case of tuberculous meningitis was admitted to hospital during the year under report. The patient was a girl of 6 years of age who had had abdominal pain, vomiting, diarrhoea, pyrexia and a mild delirium for the preceding 14 days. Lumbar puncture was performed on four occasions and cisternal puncture once. Examination of the cerebro-spinal fluid revealed a pleocytosis with an absolute lympho-cytosis, increased protein and diminished chloride contents. Tubercle bacilli were demonstrated in fairly numerous numbers in the fibrinous clot. The child died six days after admission.

4. *Toxic Peripheral Neuritis.* A girl of 10 years was admitted to the hospital at a time when the cases of poliomyelitis were resident, with a provisional diagnosis of toxic peripheral neuritis. The patient, with other members of her family had partaken of some tinned cream ten days previously, and all of them had been taken ill within 24 hours of its consumption. The patient was the one to be affected most seriously, and on account of vomiting and pains in the legs was put to bed. When allowed to get up three days later it was noticed that she had some difficulty in walking. The patient on admission had symmetrical bilateral foot drop, there was no cutaneous anæsthesia. Glycosuria was absent and examination of the cerebro-spinal fluid revealed no cytological or chemical abnormality. The patient was transferred to another hospital for the necessary physiotherapy. The differential diagnosis in this case between toxic peripheral neuritis and acute anterior poliomyelitis was extremely difficult from clinical evidence alone, but the family history of some common gastro-intestinal disorder affecting all those partaking of the cream, taken in conjunction with the exactly symmetrical distribution of the lesions and the normal cerebrospinal fluid confirm the diagnosis of toxic peripheral neuritis.

Enteric Group of Infections.

1. *Typhoid and Paratyphoid B. Fevers.* At the beginning of the year one patient was in residence, and ten cases were admitted during the year. Of the total of eleven cases under treatment eight were suffering from typhoid fever and the remainder were due to paratyphoid B. fever. Included in this total are three cases, two of typhoid fever and one of paratyphoid B fever who were transferred from the Southend Municipal Hospital.

The features of these cases admitted during the year can be briefly summarised as follows:—

No. of Case	Sex	Age	Day of Disease	Type of Infection	Result	Stay in Hospital
1	M.	15	14th	Paratyphoid B. Fever	Recovery	75 days
2	M.	28	24th	Paratyphoid B. Fever	Recovery	67 days
3	F.	14	14th	Typhoid Fever ...	Recovery	84 days
4	M.	16	14th	Typhoid Fever ...	Recovery	96 days
5	M.	25	21st	Typhoid Fever ...	Recovery	73 days
6	M.	32	14th	Typhoid Fever ...	Recovery	64 days
7	F.	38	19th	Typhoid Fever ...	Recovery	88 days
8	F.	42	25th	Typhoid Fever ...	Recovery	64 days
9	M.	32	19th	Typhoid Fever ...	Death	24 days
10	M.	55	19th	Typhoid Fever ...	Death	17 days

The average duration of residence in hospital of all cases that recovered was 76.3 days. The second case was a dining-room steward on board ship and it is worthy of note that the onset of his illness was on the day following the departure of his ship for a Mediterranean cruise. Throughout the voyage which lasted for thirteen days he suffered from headache, backache, and intermittent attacks of abdominal pain. He was febrile on several occasions. One can conclude from these facts, and others, that during the cruise the patient was actually suffering from paratyphoid fever.

Case No. 3 was transferred from the Southend Municipal Hospital where appendicectomy had been performed seven days previously. There was little macroscopic evidence of inflammation of the appendix at operation, which was followed by sustained pyrexia and abdominal pain. The fourth and eighth cases were suffering from extensive broncho-pneumonia in addition to typhoid fever. This was followed in one of them by a delayed resolution of the pneumonic process, but otherwise both made an uninterrupted recovery.

A feature of the seventh case was a persistent remittent pyrexia until the 9th week of the disease. This was probably due to a slowly resolving mesenteric lymphadenitis.

Both fatal cases were admitted to hospital in the typhoid state and in the patient of 55 years of age, there was clinical evidence of myocardial degeneration in addition. As regards the younger patient, i.e., Case No. 9, the Widal Reaction proved negative on admission and remained persistently negative until the 17th day of his residence in hospital, i.e., the 35th day of the disease.

Blood cultures were also negative on two occasions. The diagnosis of typhoid fever, however, was established before serological confirmation, by the occurrence of a large rectal hæmorrhage on the fourth day after admission. Smaller hæmorrhages occurred on five occasions subsequently and on the ninth day the patient had a typical attack of delirium tremens. From this date onwards the condition of the patient gradually deteriorated from increasing toxæmia and he died 24 days after admission to hospital.

The second fatal case, No. 10, was very toxic on admission to hospital, with evidence of toxic myocarditis. There was some temporary improvement in his condition but this was soon superseded by an increasing toxæmia resulting in his death 17 days later.

2. *Dysentery.* Four sporadic cases of B. Sonne dysentery were under treatment during the year. Two patients were nurses from a local hospital, whilst the others were two brothers, aged 7 and 9 years. All cases responded rapidly to appropriate dietetic and therapeutic treatment. The average residence in hospital was 24.7 days.

Measles.

The anticipated biennial epidemic of this disease commenced in the early part of the year. As in previous years, only those cases with complications, or where home conditions were unsatisfactory, were admitted to Hospital. A total of 24 children were under treatment during the year.

The age and sex distribution of these cases was as follows:—

Age Group	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	8-9	9-10	Totals
Males ...	—	2	1	1	1	1	2	—	—	1	9
Females ...	—	1	—	3	2	—	5	3	1	—	15

This total includes one fatal case, a little girl of 3 years, who in addition had broncho-pneumonia and who was extremely ill on admission. Her condition did not improve, there was increasing toxæmia, death occurring 12 days later.

In addition to this case, five other children were admitted with broncho-pneumonia. Another case was suffering from recent chicken pox. The boy, aged 9 years, had three fairly severe attacks of epistaxis just prior to admission. This condition was confirmed bacteriologically to be caused by the onset of nasal diphtheria. Excluding this last case whose duration of residence in hospital was prolonged in consequence of his superadded

diphtheritic infection, the average duration of treatment in all cases was 26 days. One patient, a boy, $6\frac{1}{2}$ years old, was in hospital for 53 days due to a delayed resolution of his bronchopneumonia.

Two of the total of 24 cases under treatment were transferred from the Southend Municipal Hospital, and one of these was returned to that institution after recovery from measles for continuation of orthopædic treatment which had been interrupted.

Whooping Cough.

Only four cases of whooping cough were under treatment during the year. One of the patients was 15 months old, the other three being all 3 years of age. All four children made an uninterrupted recovery and were discharged after an average stay in hospital of 34.7 days.

Erysipelas.

Two cases of erysipelas were admitted to hospital during the year, the first being a child of 10 months old with facial erysipelas, and the second being a woman of 70 years with erysipelas of the left leg. In addition to these two cases, one of the nursing staff developed facial erysipelas. In all cases there was an immediate response to sulphanilamide therapy, as shown by an immediate cessation of cutaneous spread of the lesion, a fading of the affected area, and a lessening of the accompanying toxæmia. In the case of the member of the nursing staff the skin over the whole nose was acutely inflamed and œdematous. There was some toxæmia, and a temperature of 103.4 degrees. Sulphanilamide was given orally in 1 gramme doses every four hours. Twenty-four hours later the patient was feeling much better, the temperature was falling, the affected skin area showed no extension and was much less inflamed and œdematous. By the third day the skin of the nose was quite normal in appearance apart from some desquamation, and there was no toxæmia. The patient left the hospital for a period of convalescence on the 8th day after the commencement of her illness.

There was no evidence of any toxic manifestations of the drug in either of the three cases in which sulphanilamide was prescribed.

Other Diseases.

1. *Acute Tonsillitis.* Eleven cases were under treatment during the year, three of whom were patients admitted with the provisional diagnosis of scarlet fever. In two of this latter group the diagnosis was amended to toxic erythema. The third patient was admitted to hospital as a case of scarlet fever in the pre-eruptive stage, this child's sister having been admitted to hospital two days previously with definite scarlatina. The remaining eight of the eleven cases were removed to hospital because of their close clinical resemblance to faucial diphtheria, the diagnosis being corrected after full bacteriological investigation.

2. *Chicken Pox*. In addition to the cases of nasal diphtheria complicated by chicken pox as reported elsewhere, two patients were under treatment during the year. In both cases the disease was mild in type, one child being discharged after 20 days, and the other after 21 days' residence.

3. *Ophthalmia Neonatorum*. Three cases of Neisserian Ophthalmia Neonatorum were under treatment during the year, the ages of the infants being 5, 6, and 14 days, in the cases of the two younger patients, in whom the disease was bilateral and of a severe type, the mother was also admitted so as to enable breast feeding to be continued. The average duration of residence in hospital was 35.6 days. All three were discharged from hospital having made a complete recovery, but continued to attend daily for observation for an average period of two weeks.

4. *Bronchopneumonia*. In addition to the five cases of measles admitted with bronchopneumonia, one other case was under treatment during the year. This child, one year old, was sent to the hospital with the diagnosis of laryngeal diphtheria, but on examination it was evident that there was extensive bronchopneumonia. The child made an uninterrupted recovery and was discharged from hospital in 28 days.

5. *Miscellaneous*. Under this heading are included one case of each of the following:—laryngitis, toxic erythema, catarrhal rhinitis, Vincent's angina. Two babies who were healthy were admitted with their mothers, one of whom was suffering from scarlet fever and the other from faucial diphtheria.

Staff Illness.

In the year under report acute tonsillitis again proved to be the most common malady to affect members of the nursing and domestic staffs. Ten nurses and four maids were absent from duty with this complaint for periods varying between 3 and 20 days. Three of the nurses and one maid had two attacks of acute tonsillitis during the year.

Erythema nodosum occurred four days after the onset of acute tonsillitis in one of the nurses. One of the probationer nurses developed a mild attack of faucial diphtheria, from which she made an uninterrupted recovery. It is interesting to note that when this nurse was appointed to the staff two years ago she was Schick negative. On being retested at the commencement of her attack of diphtheria she gave a positive reaction.

As reported elsewhere, one of the nursing staff developed facial erysipelas.

A staff nurse was absent from duty for four days as a result of a severe attack of tetany which commenced one hour after a dental extraction under local anæsthesia. One maid was warded with gastritis which necessitated her being absent from duty for

43 days, and another for 27 days due to a metastatic synovitis consequent upon extensive dental sepsis. Four nurses and two maids were off duty for short periods with minor ailments.

Immunisation of Nursing and Domestic Staff.

1. *Against Diphtheria.*

Number Schick tested	...	...	16
Number susceptible	...	...	2
Rate % of susceptibles	...	...	12.5%
Number immunised	...	...	1
Number post Schick tested	...	...	—

Of the two nurses having a susceptibility to diphtheria one was given active immunisation by fortnightly injections of 1 c.c. T.A.F. subcutaneously. The other nurse left the hospital before immunisation was completed.

2. *Against Scarlet Fever.*

Number Dick tested	...	...	11
Number susceptible	..	...	4
Rate % of susceptibles	...	...	36.3%
Number immunised	...	...	4
Number post Dick tested	...	...	4

The four members of the staff showing a positive Dick reaction received about 30,000 skin test doses of streptococcus toxin (scarlatinal strain) subcutaneously, in four graduated doses given at weekly intervals. All four cases gave a Dick negative reaction after the course of immunisation.

Small Pox Hospital.

For the fourth consecutive year this hospital was not opened for the reception of patients.

H. L. WHITCHURCH BEACH,

Medical Superintendent.



Southend-on-Sea Education Committee

ANNUAL REPORT

OF THE

SCHOOL MEDICAL OFFICER

for the Year

1938

CHILDREN'S CARE SUB-COMMITTEE OF THE EDUCATION COMMITTEE

WHICH CONTROLS THE SCHOOL MEDICAL SERVICE.

November, 1938 — October, 1939.

MR. F. W. SQUIER, J.P., *Chairman.*

THE MAYOR (Mr. Alderman H. A. DOWSETT, J.P.).

Ex-Officio—

Miss M. E. REAY, C.B.E., J.P.,
Chairman of the Education Committee.

Mr. Ald. S. F. JOHNSON, J.P.,
Vice-Chairman of the Education Committee.

Mrs. Coun. M. BROOM,
Chairman of Town Council's Infant Care Sub-Committee.

Members of the Education Committee—

Mr. F. W. SQUIER, J.P.	Mrs. Coun. C. LEYLAND.
Mr. Ald. R. V. COOK, J.P.	Mr. Coun. C. J. TUNNICLIFFE.
Miss E. A. T. SENIER.	

Co-opted Members—

Mr. H. PILCHER.	Mrs. LAMBERT.
Mrs. BARRIE.	Mr. W. ENEVER.
Miss COVELL.	Miss H. G. SMITH.
Mr. G. D. ROSE.	Mr. W. A. B. HAXELL.
Miss E. M. ALLARD.	Mrs. WHEELER.
Mr. A. C. BROWN.	

The following report is arranged in the manner required by the Board of Education:—

I. STAFF OF THE SCHOOL MEDICAL SERVICE.

(a) Whole Time Officers.

School Medical Officer—

Charles Grant Pugh, M.D. (Lond.), M.R.C.S. (Eng.), L.R.C.P. (Lond.), B.Sc. (Lond.), D.P.H. (Camb.), (also Medical Officer of Health).

Deputy School Medical Officer—

J. Stevenson Logan, M.B., Ch.B. (Liverpool),
D.P.H. (Liverpool).

Assistant School Medical Officers—

Jeannie Kean, M.B., Ch.B. (Edinburgh), D.P.H.
(Edinburgh).

John Conway Preston, M.R.C.S. (Eng.), L.R.C.P.
(Lond.), D.P.H. (Manchester).

Dentists—

Basil Crisp, L.D.S. (Eng.).

Edgar Crees Austen, L.D.S., R.C.S. (Eng.).

Health Visitors who also act as School Nurses—

Miss G. Hedger.

Miss N. Hitchcock.

Miss K. M. Burnett.

Miss V. Crump.

Miss M. Butcher.

Miss E. C. Brooks.

Miss M. B. Thomas (resigned June 4th).

Miss V. H. Ferguson.

Miss M. H. Harris.

Miss E. L. Lloyd-Davies.

Miss A. B. M. Docker.

Miss B. L. Kear.

Miss M. Steward (commenced June 28th).

Clinic Nurse—

Miss D. L. Willis.

Dental Nurse—

Miss G. A. McNicol.

Clerks—

Miss D. I. Allsop.

Miss G. E. Kirby.

Miss I. C. Newman.

Miss K. D. Elliott (resigned April 10th).

Miss G. L. Brooker (commenced April 11th).

(b) Part-time Officers.

Ophthalmic Surgeon—

D. D. Evans, M.B., B.Ch., M.R.C.S. (Eng.),
L.R.C.P. (Lond.), D.O.M.S.

Surgeon for Operative Treatment of Tonsils and Adenoids—

Mr. C. Hamblen Thomas, F.R.C.S. (Eng.).

Orthopædic Surgeon—

Mr. B. Whitchurch Howell, F.R.C.S. (Eng.).

Superintendent of Remedial Treatment Centre—

Miss Eileen Agnes Sampson (Member Chartered
Society of Massage and Medical Gymnastics).

Speech Therapist—

Miss Ethel Edna Brewitt (Member of the Society
of Speech Therapists).

II. CO-ORDINATION.—The co-ordination of the School Medical Services with the other Health Services of the Borough is complete, and no occasion has arisen during the year to modify the existing arrangements.

III. SCHOOL HYGIENE.—The new premises of the Southend High School for Boys and the new Earls Hall Elementary School were opened at the beginning of the autumn term. Both buildings contain rooms designed with a view to their use for Medical Inspections. It is anticipated that this will effect a considerable improvement in the convenience and privacy of medical inspection and provide better waiting facilities for parents. The new Senior School at Caulfield Road, Shoeburyness, has been completed but is not yet occupied, and work has begun on the new Senior School at Eastwood.

The new schools reflect the attention given to hygienic considerations in modern school design. There is ample space for physical training and recreation in place of the rather cramped playground of the older type of school. The classrooms are designed with a view to securing the maximum light and air, advantage being taken where possible, to extend the system of open-air classrooms, hitherto available at only two schools in the Borough.

Among less extensive improvements may be mentioned the completion of new staff-rooms at Bournemouth Park Road School.

The Municipal College has entered into occupation of the premises formerly occupied by the Southend High School for Boys, and it is anticipated that the centralisation of the previously

scattered units of the college will facilitate the co-ordination of the various departments.

IV. MEDICAL INSPECTION.—The arrangements for Routine Medical Inspection have been the same as in previous years. The number of such inspections in the Elementary Schools increased by 304 over the figure for the previous year, but in spite of this increase the number of children examined as Entrants declined by 325.

This may be to some extent attributable to the prevalence of catarrhal infections during the year causing a higher proportion of the younger children to be absent from school at the time of medical inspection. There has however been a small decline in the number of children on the school register.

In 3421 instances out of a total of 4,685 inspections the parents were present at the examination.

V. FINDINGS OF MEDICAL INSPECTIONS.

(a) *Malnutrition*.—The classification of nutrition obtained from the findings at Routine Medical Inspections does not indicate any notable alteration in the state of nutrition of the children during the year. The percentage of Elementary School children classified as of "A" nutrition was 22.3 compared with 20.2 in 1937, but the percentage of children of "C" and "D" nutrition was also increased, from 9.6 in 1937 to 10.3. An examination of the figures for the individual age groups reveals that the second age group, which usually shows the least favourable figures, corresponds much more closely this year to the other age groups, having 22.4% of "A" nutrition compared with 17.9% in 1937 and 11.0% "C" and "D" nutrition compared with 12.5% in 1937.

In the Secondary Schools the proportion of Leavers classified as of "A" nutrition was 36.6%, compared with 46.7 in 1937. The percentage of group "C" has also fallen so that it does not appear that there has been any material alteration in the nutrition of this age group.

Variations to the extent of those quoted above, in so far as they have any statistical significance, are influenced by the numerous incalculable factors inseparable from the clinical assessment of nutrition, and caution is necessary in drawing inferences from them. The very small proportion of serious malnutrition, in a year which could not be described as prosperous, seems to warrant the conclusion that the arrangements for the early ascertainment of malnutrition and the provision made for dealing with it, are adequate.

(b) *Uncleanliness*.—It is to be regretted that the number of individual children found to be unclean shows a substantial increase. There were 817 such cases of whom 242 were verminous. The corresponding figures for the previous year were 552 of whom 204 were verminous. The increase appears to have been spread evenly over the County Borough. Eastwood School which has been the

subject of unfavourable comment in the past cannot be separately indicted on this occasion.

Some of the apparent increase however may be attributed to the intensified effort which has been made to discover all cases of uncleanliness. The total number of examinations of children during the course of cleanliness surveys in the schools by School Nurses was 38,228, compared with 31,501 in 1937.

(c) *Minor Ailments and Diseases of the Skin.*—There were 10 cases of ringworm of the scalp, a figure which may be regarded as comparing satisfactorily with recent years. The figures for Impetigo remain approximately the same, as do those for Scabies. The latter condition is still unusually prevalent, there being 104 cases during the year. Many of these cases proved extremely resistant to treatment at home but responded well to treatment with Kathiolan carried out (by the Nurse) at the School Clinic. In home-treated cases it is difficult to ensure that parents carry out the instructions with the thoroughness which is essential to the successful eradication of Scabies, but to treat a large number of cases at the Clinic makes a heavy demand on the available time of the staff. Moreover, in view of the frequent occurrence of cases among other members of the family not attending school, it is desirable that the parents should receive instruction and experience in the treatment.

(d) *Visual Defects and External Eye Diseases.*—The number of cases found to require treatment for defective vision and for squint remain about the same when account is taken of the increased number examined.

The figures for external eye diseases show a slight increase, chiefly due to conjunctivitis, but there has been no alteration calling for special comment.

(e) *Nose and Throat Defects.*—There is a slight decrease in the number of children found to require treatment for defects of the nose and throat but the figures accord closely with those of the previous year.

The number found at Routine Medical Inspections to require treatment for enlarged tonsils and adenoids was 73 compared with 85 in the previous year.

The number of children found at Special Inspections to require treatment for defects of the tonsils and/or adenoids is always larger than those at Routine Inspections. The former are children who are referred for examination either by private practitioners, by Head Teachers or by parents because they appear to have a defect of the nose or throat, and are to that extent selected cases.

(f) *Ear Disease and Defective Hearing.*—The incidence of defective hearing and of Otitis Media remains about the same. The majority of the 26 cases of defective hearing were cases of catarrhal deafness of a temporary nature.

The successful treatment of Otitis Media depends to a large extent on the appreciation by parents of the possible serious consequences of what often appears to them a trivial illness. There is still need for a wider understanding of the importance of energetic treatment of discharging ears.

(g) *Dental Defects*.—Mr. Crisp, the Senior School Dentist, reports that during the year 6998 children were examined at the Elementary Schools, and of this number 4460 or 63.7% were offered treatment. The corresponding percentage last year was 52.6 and in 1936, 60%.

Of the 4460 children invited to attend for treatment 3039 accepted, representing 68% as compared with 56% last year and 50% in 1936. While this figure is still smaller than is desirable, it may be regarded as satisfactory in that it indicates a steady increase in the number of acceptances each year.

It is proposed in future to exclude from further routine inspection children whose parents have refused treatment after three inspections. This will save much valuable time and will not impose hardship on the children since cases of toothache can attend for treatment as “specials” at 9.30 each morning. It is not the practice to deny treatment to such cases even if they have previously refused it when offered.

The number of fillings during the year was 2011 of which 1557 were in permanent teeth. This represents an increase of 277 over last year.

Extractions totalled 6901, of which 5455 were of temporary teeth, compared with a total of 6149 in the previous year, showing an increase of 752. Other operations, including scalings, permanent and temporary dressings, amounted to 190.

The weekly general anæsthetic sessions, at which between 25 and 35 children are treated have done much to shorten the time which extractions take when performed under a local anæsthetic and so allow more time for conservative work. A general anæsthetic was given on 709 occasions during the year. The anæsthetic employed was nitrous oxide.

The equipment of the clinic has been much improved. All-electric dental units have been installed with a consequent increase in efficiency and cleanliness. There is no doubt that clinics furnished with equipment which compares favourably with that found in private surgeries is a factor which influences the rate of acceptance of treatment.

The provision of branch clinics at Leigh and Shoburyness awaits the completion of a scheme for combined School Medical and Child Welfare premises in which, it is hoped, dental facilities will be provided.

(h) *Orthopædic and Postural Defects*.—The number of cases of orthopædic defect sufficiently serious to require reference either to the Specialist Orthopædic Surgeon or to the Remedial Treatment

Centre, shows no material alteration. A rather larger number of children in the elementary schools was recorded as suffering from defects other than spinal curvature. The majority of these were minor degrees of flat-foot or deficient expansion of the chest, conditions which respond to measures of general hygiene combined with appropriate exercises.

The Education Committee has appointed two organisers of physical training and it is hoped that the increasing emphasis which is now being laid on physical fitness will result in a diminution of these defects.

(i) *Heart Disease and Rheumatism*.—14 children were recorded as suffering from serious heart conditions, a number of these being congenital lesions.

The incidence of minor abnormalities of the heart remains unchanged. The majority of these are of a “functional” nature and provided supervision is exercised over the amount of physical training and competitive sport in which they engage, they rarely give rise to anxiety.

Cases of Acute Rheumatism do not often come under the notice of the School Medical Service but mild muscular rheumatism continues to be observed fairly frequently.

(j) *Tuberculosis*.—Pulmonary Tuberculosis continues to be a rarity. The two cases recorded were cases of hilar gland infection and not of active lung disease.

Non-pulmonary tuberculosis, usually of glands, continues to be met with occasionally.

VI. FOLLOWING UP AND WORK OF NURSES.—No occasion has arisen to modify the arrangements in connection with following up work. The amount of work accomplished, as far as it can be shown by statistics, remains about the same.

The following is a summary of the work done by the nurses:—

	No. of Children.	No. of Visits.
Enlarged tonsils, adenoids or mouth breathing	401	585
Squint or defective vision	194	289
Deformities ...	180	318
Verminous conditions ...	402	611
Infectious Diseases ...	691	1,310
Contagious Skin Diseases (Impetigo, Scabies, Ringworm) ...	252	429
Malnutrition, neglect, etc. ...	101	145
Defective Teeth ...	63	78
Tuberculosis ...	23	126
Other conditions, e.g. :—Blepharitis, Bronchitis, Otorrhœa, etc. ..	1,210	1,707
Total ...	3,517	5,598

VII. ARRANGEMENTS FOR TREATMENT.

(a) *Malnutrition*.—The Education Committee continues to supply free meals, free milk, Cod Liver Oil and Malt, and Parish's Chemical Food to necessitous children on the recommendation of the School Medical Officer. The children thus treated are regularly re-inspected as to their progress. The decision whether to recommend a child for free meals must depend at least as much on economic circumstances as on medical evidence of malnutrition. In a town which has a large amount of "seasonal" employment it is a common experience to find parents applying for free meals because their financial resources, hitherto adequate, have suddenly changed. In such a case it is not to be expected that the child will show evidence of malnutrition, but the emphasis which has rightly been placed on the preventive aspects of the School Medical Service renders it desirable that assistance should be given promptly, provided the case is eligible on economic grounds. It is consequently the practice to refer all applications to the School Attendance Officers for investigation of the financial circumstances of the family, even though no evidence of actual malnutrition is found on medical examination.

(b) *Uncleanliness*.—The facilities for the cleansing of children at the School Clinic were detailed in the report for 1937 and remain unaltered. During 1938, 71 children were cleansed. It was not necessary to employ compulsory powers of cleansing, but proceedings under School Attendance Bye-laws were taken in 6 instances.

(c) *Minor Ailments*.—The Minor Ailment Treatment Centre at the Central Clinic in Southend is open each morning for the provision of treatment for minor ailments, and a Medical Officer attends every afternoon.

A Medical Officer holds an Inspection Clinic at Eastwood on Mondays at 10 a.m., at Shoeburyness on Tuesdays at 2.15 p.m., and at Leigh on Tuesdays at 5 p.m. It has not yet been possible to make provision for the contemplated additional clinics for these outlying areas of the Borough. In necessitous cases where hardship can be shown to exist and attendance would not otherwise be possible, it is the practice of the Committee to afford facilities by payment of bus fares, etc., to enable children to attend the Clinic.

Radiological treatment of scalp ringworm is carried out at the Queen Mary's Hospital for Children, Bethnal Green, and in necessitous cases the whole or part of the cost is defrayed by the Committee. In 1938, 3 children were treated under these arrangements.

The following table shows the conditions for which children received treatment for minor ailments at the Treatment Centre:—

					No. of Children	No. of Attendances
Verminous or Nitty Hair	...	...	...	...	71	81
Scabies	...	...	...	...	47	284
Impetigo	...	...	...	...	64	245
Other skin diseases	...	...	...	...	9	93
Conjunctivitis, Blepharitis, etc.	...	...	...	...	8	15
Ear Discharge, Wax in Ear, etc.	...	...	...	...	124	596
Cuts, Abrasions, Burns, etc.	...	...	...	...	100	258
Totals	...	...	...	...	423	1,572

(d) *Visual Defects and Diseases of the Eye.*—Children requiring treatment are referred to the Committee's Ophthalmic Surgeon who attends twice weekly. Spectacles are dispensed to his prescription by a local firm of opticians under contract, and are verified after supply. During 1938, spectacles were provided for 22 necessitous children at the expense of the Education Committee.

The Eye Clinic was held on 90 sessions during the year, the number of children treated and the number of attendances being as follows:—

				New Cases.	Old Cases.	Attend- ances.
Elementary Pupils	...	...	...	325	262	1,520
Secondary Pupils	...	...	...	91	177	599
Young Children under 5	...	...	...	30	13	110
Junior Instruction Centre Pupils	...	...	...	19	4	60
Totals	...	...	...	465	456	2,289

There were 11 cases of Phlyctenular conjunctivitis of which 9 were elementary school children, and in addition 3 cases of phlyctenular keratitis and 8 of conjunctivitis. This does not of course represent the whole incidence of conjunctivitis in the child population; the majority of the simple cases are dealt with by the Assistant Medical Officers without reference to the Eye Clinic.

There were three cases of congenital cataract, three of choroiditis and two each of interstitial keratitis, hysterical amblyopia and exophoria without refractive error.

The following table show the results of the refractions:—

Defect	Elementary School Children	Secondary School Children	Young Children under 5	Junior Instruction Centre.	Total
Myopia—Uncomplicated	73	84	—	3	160
Simple Myopic Astigmatism	6	1	—	—	7
Compound Myopic Astigmatism	70	65	—	5	140
with Squint ...	1	—	—	—	1
Hypermetropia	100	26	5	3	134
with Squint ...	50	12	16	1	79
Simple Hypermetropic Astigmatism	30	14	—	—	44
with Squint ...	1	—	—	—	1
Compound Hypermetropic Astigmatism ...	113	22	6	5	146
with Squint ...	56	7	4	—	67
Mixed Astigmatism ...	6	14	1	—	21
Anisometropia	3	—	—	—	3
with Squint ...	1	—	—	—	1
Compound Hypermetropic Astigmatism with Nystagmus	3	—	—	—	3
Compound Myopic Astigmatism with Nystagmus	1	—	—	—	1
Simple Hypermetropic Astigmatism with congenital cataract ...	1	—	—	—	1
Hypermetropia with Nystagmus	1	—	—	—	1
No error of refraction ...	22	10	7	1	40
One attendance	7	3	—	—	10
Squint without error ...	1	—	—	—	1
Persistent Hyaloid Artery	1	—	—	—	1
Habit spasm	1	—	—	—	1

(e) *Tonsils and Adenoids*.—Operative treatment of tonsils and adenoids is provided at the Southend General Hospital where the children are detained for two nights or as long as necessary subsequent to the operation. All children recommended by the Medical Officers for operative treatment are examined prior to admission to hospital by the Surgeon at special clinics held at intervals of a month or less.

Of 408 children seen at the Ear, Nose and Throat Clinics by the Specialist Surgeon, 307 were elementary school children, the remainder being children under 5 years who attended under the arrangement with, and at the cost of the Maternity and Child Welfare Committee.

The following table summarises the work done under this scheme:—

Number of children who received operative treatment—

Elementary school children	...	...	...	...	277
Secondary school children	..	...	...	...	3
Young children under 5	...	...	...	..	74
				Totals	354

	Elementary School Children.	Secondary School Children.	Young Children Under 5.
Number of children whose parents contributed whole or part of cost	73	2	18
Number of Hospital Provident Fund cases*	109	—	18
Number of L.M.S. Hospital Fund cases*	7	—	2
Number of cases in which no charge was made	88	1	36
Totals	277	3	74

Contributions made by parents.

	£	s.	d.
Elementary school children	83	10	9
Secondary school children	4	4	0
Young children under 5	17	18	3

* The amount recoverable in respect of the 136 Provident Fund and L.M.S. Hospital Fund cases is 10/- per case.

(f) *Ear Disease and Defective Hearing*.—Full use is made of the facilities at the School Clinic to obtain frequent and efficient treatment of ear disease, and where necessary, children are referred to the Special Ear, Nose and Throat Clinic for advice by the Specialist Surgeon. There are still too many cases of chronic or recurrent otorrhoea in which parents either do not seek treatment or do not persevere with it. To secure skilled treatment for such cases at the Central School Clinic involves a considerable dislocation of school attendance if a child has to come daily or twice daily from one of the more distant areas of the Borough.

(g) *Dental Defects*.—Dental treatment is available for all elementary school children at the Central School Clinic, and also for pupils attending the Junior Instruction Centre.

Reference has been made above to the increased efficiency of the Dental Clinic consequent upon the installation of new apparatus and the introduction of regular anæsthetic sessions.

(h) *Orthopædic and Postural Defects*.—The arrangement made for the treatment of Orthopædic and Crippling defects remained the same as in previous years and the smooth working of the scheme is largely attributable to the co-operation of, and assistance rendered by, the Staff of the Southend General Hospital. The arrangements made for co-ordinating the work of the Remedial Treatment Centre and of the Health Visitors with the Scheme have been described in previous reports. In-patient hospital treatment was provided by the Maternity and Child Welfare Committee for two children suffering from spastic diplegia and exostosis of the thumb, and by the Education Committee for six children suffering from pes cavus, crippling from old tuberculous disease of the hip, exostosis of the tibia, hallux rigidus, patellar bursitis and torticollis respectively.

The following is a classification of the conditions treated:—

				Elementary School Children	Secondary School Children	Young Children Under 5	Total
Congenital Conditions.							
Dislocation of hip	...	...	...	1	—	1	2
Erb's Paralysis	...	...	...	—	—	1	1
Talipes	...	...	...	2	—	6	8
Flexion Deformity	...	...	...	1	—	—	1
Spina Bifida	...	...	...	1	—	—	1
Shortening of lower limb	...	...	...	1	—	2	3
Rickets and its Sequelæ	...	...	...	—	—	7	7
Nervous Conditions							
Spastic Hemiplegia	...	...	...	2	—	1	3
Spastic Diplegia	...	...	...	6	—	1	7
Old Poliomyelitis	...	...	...	4	1	—	5
Tuberculosis.							
Sacro-iliac	...	...	...	1	—	—	1
Hip	...	...	...	5	—	—	5
Knee	...	...	...	1	—	—	1
Postural Defects.							
Kypho-lordosis	...	...	...	3	—	—	3
Kyphosis	...	...	...	5	—	—	5
Scoliosis	...	...	...	2	—	—	2
Flat feet	...	...	...	22	—	8	29
Miscellaneous.							
Torticollis	...	...	...	2	—	1	3
Old Osteomyelitis	...	...	...	3	—	—	3
Schlatter's Disease	...	...	...	1	—	—	1
Köhler's Disease	...	...	...	1	—	—	1
Genu Valgum	...	...	...	4	—	9	13
Genu Varum	...	...	...	—	—	9	9
Not classified	...	...	...	15	—	4	19

The Remedial Treatment Centre.—The Centre continues to do good work under conditions which are somewhat less than ideal. The Superintendent attends the quarterly sessions of the Orthopædic Clinic in order to obtain first-hand information of the requirements of the Specialist Surgeon. Children attending the Centre are regularly re-inspected and if they fail to make satisfactory progress are referred to the Orthopædic Clinic.

During the year 53 children were in attendance, of whom 14 were discharged, 4 ceased to attend and 5 either left school or left the town.

The following table shows the principal defects treated:—

Scoliosis	...	...	...	...	24
Kyphosis	...	...	...	...	19
Lordosis	...	...	...	...	4
Faulty Posture		...	...	...	10
Flat Feet	...	...	...	...	8
Knock-knees	...	...	...	...	3

(i) *Heart Disease and Rheumatism.*—In-patient treatment for these conditions is available at both general hospitals in the area. Children suffering from cardiac conditions are regularly supervised and Head Teachers are informed of any modification of the school curriculum as regards physical training which is considered advisable.

(j) *Tuberculosis.*—The Council's Tuberculosis Officer attends weekly at the Open Air School, and all children suffering from definite or suspected Tuberculosis are referred to him at the Dispensary.

(k) *Speech Defects.*—The work of the Speech Clinic has been extended by the commencement in the autumn term of an additional session. There are now three sessions each week during school terms and in addition one morning per month is devoted by the Speech Therapist to visiting the schools and discussing with the Head Teachers the problems and progress of the children attending or who have ceased to attend the Clinic.

The new arrangements have helped to relieve the congestion of the waiting list by making it possible to treat more children simultaneously and by enabling some of the more severe cases to receive treatment twice weekly, thus shortening the duration of their attendance.

During the year there have been 923 attendances out of a possible 1,220. Of the 10 children discharged, 9 were stammerers and 1 a case of cleft palate. Two children ceased to attend. There has been one relapse, viz:—a stammerer who was discharged under observation in 1937 and whose temporary relapse was due to emotional causes, yielding to further treatment at the Clinic for a period of a few weeks.

Nine fresh cases have commenced treatment and eleven have been interviewed and placed on the waiting list, the parents being advised as to home treatment during the interval.

It has been possible for the first time to undertake treatment of a limited number of children suffering from defects other than stammering and cleft palate, and who are not suitable for group treatment in classes.

Thirty-three visits were made to schools, and the co-operation and interest of the Head Teachers have been of material assistance. Reports from the schools indicate that the children have gained confidence with the improvement of speech, resulting in several cases in a higher standard of school work and a general development of personality.

VIII. INFECTIOUS DISEASES.—The Health Visitors investigate promptly any absence from school in which there is a suspicion of infectious disease, and the arrangements for the inspection of class contacts and the investigation of school outbreaks continue to be satisfactory. Supervision of the isolation of home treated cases is ensured by regular visits by the Health Visitors.

No action as regards school closure under Article 22 of the Code Grant Regulations was necessary.

IX. OPEN AIR EDUCATION.—A report on the Open Air School appears in the section headed Special Schools.

Open Air Classrooms.—The system of classrooms with folding windows, hitherto only available at Thorpe School, has been incorporated in the design of the new Earls Hall School.

School journeys are organised on the initiative of the Head Teachers. The practice of medical examination of children who undertake these journeys or attend school camps has been continued. They are examined as to their fitness to undertake the type of excursion proposed and as to their freedom from infection.

School Camps are organised by the Head Teachers and the Education Committee accepts no responsibility for them.

X. PHYSICAL TRAINING.—The attention of Head Teachers is drawn to all cases in which some modification of physical training or restriction of competitive sports is advisable. The appointment of two organisers of physical training has helped to stimulate interest in this important subject.

XI. PROVISION OF MEALS.—The Committee maintains a feeding centre in connection with Eastwood School. In other areas necessitous children are fed at the premises of local caterers to which members of the Committee pay regular visits.

Free Meals, Milk, Cod Liver Oil and Malt, and Parrish's Food are supplied to necessitous children on the recommendation of the

School Medical Officer. All these children are examined before recommendation and are regularly re-inspected.

At the end of 1938, 5,595 children were receiving milk in school on payment by their parents, and 772 children were receiving free milk.

During the financial year 1938-39 the following were supplied by the Committee:—

						No.		Cost			
								£	s.	d.	
Meals	...	...	...	...	...	17,419		481	7	8	(food only)
Milk ($\frac{1}{8}$ pints)	...	...	...	...	...	133,112		277	6	4	
Malt and Oil (1lb. tins)	...	...	...	...	...	346		10	16	3	
Parrish's Food (6oz. bottles)	...	...	...	...	...	132		4	2	6	
Glucose (lbs.)	...	...	...	...	...	3			4	6	

(£1 2s. 10d. was received from parents).

XII. CO-OPERATION OF PARENTS, TEACHERS, SCHOOL ATTENDANCE OFFICERS AND VOLUNTARY BODIES.—The assistance received throughout the year, alike from individuals and from institutions, has contributed materially to the satisfactory and harmonious working of the School Medical Service.

The proportion of parents who attend Routine Medical Inspections remains commendably high, particularly in the first age group, where it is most important that they should be present.

There is room for improvement in the attendance of parents at the School Clinics. Too many children attend unaccompanied by parents, and apparently solely because the School Attendance Officer requires a medical certificate to justify the children's non-attendance at school; in many of these cases the desire for advice is doubtless genuine but the parents do not appreciate the impossibility of giving medical instructions to a child of 7 or 8 years with any hope of their being carried out.

XIII. BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

(a) The provision for the ascertainment of defective children and the arrangements for dealing with them are adequate and have proved satisfactory in operation.

(b) The system of retaining dull and backward children in special classes in the Elementary Schools has continued to commend itself as being the most satisfactory method of dealing with that problem.

(c) SPECIAL SCHOOLS.

(i) *The Open Air School*.—The Clinical Tuberculosis Officer who attends weekly at this school and is responsible for the medical supervision of the children, reports that on January 1st, 1938, there were 90 children on the roll. During the year 43 children were admitted, 28 were discharged as fit to attend Elementary Schools and 14 left on account of removal from the district or on attaining school leaving age.

There were 204 special inspections and 614 re-inspections.

The following Table shows the defects found:—

Defect.	Requiring treatment.	Requiring observation.
Impetigo	3	—
Other Diseases of the Skin	16	—
Conjunctivitis	12	—
Corneal Opacity	—	1
Other Eye Conditions	—	3
Squint	—	4
Defective Vision	2	16
Otitis Media	20	—
Chronic Tonsillitis	—	4
Chronic Tonsils and Adenoids	2	20
Other Nose and Throat Conditions ..	7	—
Cervical adenitis (non-tuberculous) ...	—	2
Defective Speech	5	—
Organic Heart Disease	3	—
Anæmia	—	14
Asthma	12	7
Other non-tuberculous diseases of chest ...	7	30
Tuberculosis—Pulmonary	—	2
Tuberculosis—Glands	—	10
Tuberculosis—Bones and Joints	—	1
Tuberculosis—Other forms	1	6
Epilepsy	6	—
Chorea	3	—
Other nervous conditions	—	13
Rickets	—	1
Other Deformities	11	—
Coeliac Disease	2	1
Rheumatism	6	—
Debility	—	57

(ii) *Special School for Feeble Minded Children.*—The arrangements made for providing the type of education best suited for these defective children remain the same as last year. At the end of the year there were 31 children on the roll.

(iii) *Special Residential Schools not maintained by the Authority.*—Children were maintained in the following Special Residential Schools during 1938:—

Blind	Boys.	Girls.
East Anglian School	—	2
Royal Normal College	3	1
Chorley Wood School	—	2
Swiss Cottage Blind School	2	1†
Brighton School for Blind Boys	1	—
Deaf.		
Royal School for Deaf, Margate	4	1
Hugh Myddleton School for Deaf	1*	—
Anerley School for Deaf	1	—
Physically Defective.		
Norwood Hospital	1	—
St. Michael's Orthopædic Hospital	—	1
Epileptic.		
Lingfield Epileptic Colony	1	1

Feeble-minded.	Boys.	Girls.
Royal Eastern Counties' Institution for the Feeble-minded	3†	—
Rayner's School, Penn	1	1
St. Joseph's School, Sambourne	1	—
Littleton House, Girton	1	—
East Hill House, Colchester	2†	—
Marlesford Lodge School, Hammersmith ...	—	1†
Kingsmead Special School for the Feeble-minded	—	1†
Besford Court Certified Institution	1	—

* Indicates a child transferred to another Authority.

† Indicates a child who was discharged during the year.

XIV. FULL TIME COURSES FOR HIGHER EDUCATION FOR BLIND, DEAF, DEFECTIVE AND EPILEPTIC STUDENTS.—Two blind students are receiving instruction at Chorley Wood College and two at Swiss Cottage, and one pupil is at Chalfont Epileptic Colony.

XV. NURSERY SCHOOLS.—No Nursery Schools or Classes are provided by the Authority.

XVI. SECONDARY SCHOOLS AND OTHER INSTITUTIONS OF HIGHER EDUCATION.

1. *Medical Inspection*.—(a) The Authority provides two secondary schools for boys and two for girls, as well as a Municipal College to which pupils of either sex are admitted.

(b) Medical Inspections are conducted twice a year and are similar to the Routine Medical Inspections held in the elementary schools. Pupils are routinely inspected during the year in which they enter the school, thereafter at two yearly intervals, and finally during the year in which it is anticipated they will leave school; during the intermediate years they are medically examined if there is any special indication that such action is advisable.

The policy initiated during 1937 of examining those prospective entrants to whom it is proposed to grant "special places" during the summer term, has been continued. This procedure ensures that a child to whom a special place is awarded is not debarred from obtaining the full benefit of higher education by a remediable physical defect, such as high myopia, without danger to his health.

(c) With the exception of certain full-time senior technical students and part-time pupils attending the Municipal College, all pupils at these institutions are inspected.

2 (a) *Following up and Medical Treatment*.—Parents who attend inspections are advised how best to obtain treatment, and those who have not been present are informed by letter. The Principals are informed of the results of medical inspections and their co-operation enlisted where necessary in securing treatment or modification of physical training.

All pupils in whom defects are found are systematically re-inspected. Pupils who fail to make the educational progress expected of them are referred for special inspection.

As in former years the commonest defects found are those of teeth, of vision, and of posture. Defects of nutrition are happily not common, but no difficulty is experienced in securing appropriate treatment where it is advised.

(b) The only treatment ordinarily provided for secondary school children is for errors of refraction.

(c) The Governors always sanction such treatment as is ordinarily available to elementary school children being provided for children whose parents cannot afford to obtain it privately. In addition, during the year the consent of the Governors was given to the attendance of 4 secondary school pupils at the Speech Defects Clinic.

XVII. PARENTS' PAYMENTS.—A charge of 6d. per attendance is made for dental treatment but may be remitted on occasion if the parents' circumstances justify such a course.

For the operative treatment of Tonsils and Adenoids, the X-ray treatment of Ringworm and the institutional treatment of Orthopædic defects and the provision of appliances, the full cost or such portion, if any, as the Committee regards as equitable, is recovered from the parents.

No contribution is required from parents who are members of the Southend-on-Sea General Hospital Provident Fund, in respect of in-patient treatment and attendance at the Physiotherapy Department in connection with the Orthopædic Scheme, an agreed sum being received from the Provident Fund in such cases.

XVIII. HEALTH EDUCATION.—In association with the Central Council for Health Education who supplied poster material, a campaign was conducted to inform the public of the extent of the Health Services and to urge them to make greater use of the facilities available to them. Reports from the Health Visitors and the attendances at the School Clinics indicate that the campaign was successful in reaching and awakening the interest of a wide public.

XIX. SPECIAL ENQUIRIES.—No special investigations have been undertaken during the year.

XX. JUNIOR INSTRUCTION CENTRE.—Routine Medical Inspection is held on two sessions each month during which the Centre is open, one session being devoted to pupils of each sex. All treatment, including dental treatment, ordinarily available for elementary school children is afforded to such pupils as are ineligible for medical benefit under the National Health Insurance Acts.

The number of parents who accept the invitation to be present at medical inspections is small, but the parents of those pupils in whom a defect is found are notified by letter and advised to seek treatment. There were fewer cases of refusal to submit to examination this year but there is still a certain proportion of pupils who are reluctant to obtain treatment for minor defects which do not cause them serious inconvenience.

Careful attention is paid to the nutritional state of these pupils. Evidence of malnutrition is not common but where necessary either free meals or free milk is provided. In future all pupils will receive free of charge milk and biscuits daily. During 1938 two pupils received free milk.

The following tables show the work done under this scheme:—

	Boys	Girls	Total
1. Medical Inspection.			
No. of visits of Inspection	8	8	16
Total No. of Inspections and Re-inspections	164	131	295
No. of individuals inspected by the School Medical Staff	121	100	221
2. Juveniles inspected during the period who were found to require treatment.			
No. of individuals found to require			
(a) Medical Treatment	20	23	43
(b) Dental Treatment	14	23	37
3. No. of Individuals who received treatment under the Authority's Scheme:—			
Eye Defects	11	12	23
No. for whom spectacles were prescribed	6	9	15
*No. who obtained spectacles	5	5	10
Ear Defects	—	—	—
Minor Ailments	2	3	5
Defects of Nose and Throat—			
(i) operative treatment	—	—	—
(ii) other forms	—	—	—
Orthopædic Defects	—	—	—
Dental Defects	13	46	59
Other Defects	—	—	—

* One pupil was provided with spectacles at the cost of the Education Committee.

4. Analysis of Dental Treatment.

	No.	Attend- ances	Extrac- tions	Fillings	Dressings
Boys	13	20	16	11	2
Girls	46	107	70	59	11
Total	59	127	86	70	13

NOTE:—Juveniles attending the Junior Instruction Centre are eligible for dental treatment as soon as they commence attendance there. In consequence some of them begin dental treatment before they are routinely inspected. For this reason more girls received dental treatment than were found at Routine Medical Inspection to require such treatment.

XXI. MISCELLANEOUS.—The Medical Officer advises the Committee with regard to the physical fitness of candidates for appointment and reports upon the health of members of the Committee's staff who are referred to him.

Employment of Children.—No child is permitted to engage in Juvenile Employment unless a certificate of fitness is obtained from the School Medical Officer. During the year 195 children were examined and 191 were passed as medically fit and 4 were rejected.

Child Guidance Unit.—The Chief Education Officer has furnished the following information relative to the work undertaken in connection with Child Guidance.

The Education Committee with the approval of the Board of Education has established a Child Guidance Unit, the staff of which consists of an Educational Psychologist and a Psychiatric Social Worker. There is no Psychiatrist attached to the unit; cases in which the co-operation of a Psychiatrist is considered essential are dealt with either by referring the child to a hospital such as the West End Hospital for Nervous Diseases or by boarding-out near a Child Guidance Clinic where a Psychiatrist is available.

Children are referred to the Educational Psychologist from the Juvenile Court, by the Probation Officers, by Head Teachers, by the School Medical Officer or at the request of parents. Apart from juvenile delinquents about fifty per cent. of the referrals come directly from the schools.

The Educational Psychologist and the Social Worker are engaged together in the treatment of cases for five sessions a week. At each session three or four children attend, accompanied by their parents if possible. The remainder of the Educational Psychologists' time is largely occupied in the schools, while the Social Worker is engaged in visiting the homes of parents who are unable to attend with their children, in visiting schools in connection with reports on delinquents, in addressing meetings of Parent - Teachers associations, and in the supervision of boarded-out children.

An important part of the work of the Child Guidance Unit is the examination by the Educational Psychologist of delinquents appearing in the Juvenile Court, and the investigation of their home circumstances by the Social Worker. Over a hundred such cases have been dealt with during the year. Only a small percentage of the delinquent children examined were considered to be in need of Child Guidance treatment, but it is interesting to note that over 25 per cent. of the cases referred from all sources for Child Guidance, exhibited symptoms which might have caused the children to be charged in the Juvenile Court.

The following Tables indicate the nature and scope of the work undertaken during the year:—

I.

No. of New Cases Diagnosed only.					
(i) Juvenile Delinquents	...	...	...	...	102
(ii) From other Sources	...	...	...	...	70
No. of New Cases Treated	...	...	...	...	56
Total No. of New Cases Investigated					228

II.

No. of cases under treatment at the beginning of the year	...	...	...	...	...	12
No. of new cases treated	...	...	...	...	...	56
Total No. of cases treated						68

III.

Position of the treated cases at the end of the year.					
Satisfactory adjustment made	...	...	...	...	29
Removed from home environment	...	...	...	...	8
Removal from district, etc.	...	...	...	...	8
Still under treatment	...	...	...	...	23
Total					68

IV.

Reasons for referral in the 56 new cases selected for treatment.					
Juvenile Court Cases	...	...	...	...	10
Stealing	...	...	...	...	8
Educational Retardation	...	...	...	...	3
Behaviour Problems in School	...	...	...	...	8
Behaviour Problems at Home	...	...	...	...	9
Educational Advice	...	...	...	...	4
Nervousness (tics, food fads, etc.)	...	...	...	...	4
"Temper Tantrums"	...	...	...	...	2
Sex Delinquency	...	...	...	...	2
Faecal incontinence	...	...	...	...	2
Refusing to Attend School	...	...	...	...	1
Wandering	...	...	...	...	1
Faecal retention	...	...	...	...	1
Refusing to speak in School	...	...	...	...	1
					56

Elementary Schools.

RETURN OF MEDICAL INSPECTIONS.

1st January, 1938, to 31st December, 1938.

TABLE I.

A.—Routine Medical Inspections.

Number of Code Group Inspections :—

Entrants	...	...	...	...	...	...	1,158
Intermediates	...	...	...	...	...	...	1,393
Leavers	...	...	...	...	...	...	1,672
						Total	4,223
Number of other Routine Inspections	...	...					462
						Grand Total	4,685

B.—Other Inspections.

Number of Special Inspections	...	...	...	7,399
Number of Re-inspections	...	...	...	8,823
			Total	16,222

C.—Children Found to Require Treatment.

(excluding Defects of Nutrition, Uncleanliness and Dental Diseases).

			For defective vision (excluding squint)	For all other conditions recorded in Table IIA	Total
Prescribed Groups :—					
Entrants	...	...	3	144	147
Second Age Group	...	...	55	179	230
Third Age Group	...	...	64	166	225
Total (Prescribed Groups)	...	122	489	602	
Other Routine Inspections	...	18	46	59	
Grand Total	...	140	535	661	

ELEMENTARY SCHOOLS.

TABLE II.

A RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION
IN THE YEAR.

						Routine Inspections. No. of Defects		Special Inspections. No. of Defects	
						Requiring treatment	Requiring to be kept under observation, but not requiring treatment	Requiring treatment	Requiring to be kept under observation, but not requiring treatment
Skin	...	(1) Ringworm—Scalp	—	—	10	—			
		(2) Ringworm—Body	2	—	16	2			
		(3) Scabies	3	—	101	8			
		(4) Impetigo	11	—	439	—			
		(5) Other Diseases (Non-Tuberculous)	28	5	536	42			
Total (Heads 1 to 5) ...						44	5	1102	52
Eye	...	(6) Blepharitis	27	—	26	1			
		(7) Conjunctivitis	20	1	133	2			
		(8) Keratitis	—	—	1	—			
		(9) Corneal Opacities	1	—	1	2			
		(10) Other Conditions (excluding Defective Vision and Squint) ...	20	4	119	9			
Total (Heads 6 to 10) ...						68	5	280	14
Ear	...	(11) Defective Vision (excluding squint)	140	183	353	36			
		(12) Squint	27	19	49	6			
		(13) Defective Hearing	7	12	1	6			
		(14) Otitis Media	17	6	156	8			
		(15) Other Ear Diseases	3	1	89	11			
Nose and Throat		(16) Chronic Tonsillitis only	8	130	110	30			
		(17) Adenoids only	10	19	7	7			
		(18) Chronic Tonsillitis and Adenoids...	73	55	254	46			
		(19) Other Conditions	10	10	291	59			
(20) Enlarged Cervical Glands (Non-Tuberculous) ...						1	12	58	38
(21) Defective Speech						5	21	10	4
Heart and Circulation		Heart Disease :—							
		(22) Organic	—	28	4	6			
		(23) Functional	—	7	2	5			
		(24) Anaemia	17	1	54	17			

ELEMENTARY SCHOOLS.

TABLE II.—*continued.*

						Routine Inspections No. of Defects		Special Inspections No. of Defects	
						Requiring treatment	Requiring to be kept under observation, but not requiring treatment	Requiring treatment	Requiring to be kept under observation, but not requiring treatment
Lungs	...	(25) Bronchitis	...	...	...	14	23	45	4
		(26) Other Non-Tuberculous Diseases...				3	36	89	47
Tuberculosis	Pulmonary :—								
	(27)	Definite	...	...	...	—	—	—	2
	(28)	Suspected	...	...	...	—	—	—	—
	Non-pulmonary :—								
	(29)	Glands	...	...	...	—	2	—	10
	(30)	Bones and Joints	...	...	...	—	—	—	1
	(31)	Skin	...	...	...	—	—	—	1
	(32)	Other Forms	...	...	...	—	—	2	7
Total (Heads 29 to 32) ...						—	2	2	19
Nervous System	(33)	Epilepsy	...	...	...	—	2	2	5
	(34)	Chorea	...	...	...	2	7	11	13
	(35)	Other Conditions	...	...	...	—	9	4	24
Deformities	(36)	Rickets	...	...	...	—	—	3	1
	(37)	Spinal Curvature	...	...	...	48	31	11	1
	(38)	Other Forms	...	...	...	114	23	88	10
(39) Other Defects and Diseases (excluding Defects of Nutrition, Uncleanliness and Dental Diseases)						94	128	1633	500
Totals ...						705	839	4708	971

B. CLASSIFICATION OF THE NUTRITION OF CHILDREN
INSPECTED DURING THE YEAR IN THE ROUTINE AGE
GROUPS.

Age-groups	No. of Children Inspected	A (Excellent)		B (Normal)		C (Slightly Subnormal)		D (Bad)	
		No.	%	No.	%	No.	%	No.	%
Entrants ...	1158	273	23.6	773	66.7	112	9.7	—	—
Second Age-group	1393	312	22.4	928	66.6	151	10.8	2	0.2
Third Age-group	1672	366	21.9	1133	67.8	173	10.3	—	—
Other Routine In- spections ...	462	95	20.6	325	70.3	42	9.1	—	—
Total ...	4685	1046	22.3	3159	67.4	478	10.2	2	0.1

ELEMENTARY SCHOOLS.

TABLE III.

RETURN OF ALL EXCEPTIONAL CHILDREN IN
THE AREA.

BLIND CHILDREN.

At Certified Schools for the Blind	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
7	—	—	1	8

PARTIALLY SIGHTED CHILDREN.

At Certified Schools for the Blind	At Certified Schools for the Partially Blind	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
5	—	6	1	—	12

DEAF CHILDREN.

At Certified Schools for the Deaf	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
6	—	—	—	6

PARTIALLY DEAF CHILDREN.

At Certified Schools for the Deaf	At Certified Schools for the Partially Deaf	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
1	—	2	1	1	5

MENTALLY DEFECTIVE CHILDREN.

FEEBLE-MINDED CHILDREN.

At Certified Schools for Mentally Defective Children	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
34	7	3	7	51

EPILEPTIC CHILDREN.

CHILDREN SUFFERING FROM SEVERE EPILEPSY.

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
3	1	—	—	4

PHYSICALLY DEFECTIVE CHILDREN.

A.—TUBERCULOUS CHILDREN.

I. CHILDREN SUFFERING FROM PULMONARY
TUBERCULOSIS.

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
—	—	—	—	—

II. CHILDREN SUFFERING FROM NON-PULMONARY
TUBERCULOSIS.

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
12	18	7	1	38

B. DELICATE CHILDREN.

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
76	10	2	1	89

C. CRIPPLED CHILDREN.

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
8	28	6	3	45

D. CHILDREN WITH HEART DISEASE.

At Certified Special Schools	At Public Elementary Schools	At other Institutions	At no School or Institution	Total
3	7	—	4	14

CHILDREN SUFFERING FROM MULTIPLE DEFECTS.

Combination of Defect	At Certified Special Schools	At Public Elementary Schools	At Other Institutions	At no School or Institut'n	Total
Deaf, Dumb and Epileptic	1	—	—	—	1
Crippled and Feeble-minded	2	—	—	1	3

ELEMENTARY SCHOOLS.

TABLE IV.

RETURN OF DEFECTS TREATED DURING THE YEAR.

TREATMENT TABLE.

GROUP I.

MINOR AILMENTS (excluding uncleanness, for which see Group V.)

Disease or Defect 1	Number of Defects treated, or under treatment, during the year		
	Under the Authority's Scheme 2	Otherwise 3	Total 4
Skin—			
Ringworm (Scalp)—			
i. X-Ray Treatment ...	3	3	6
ii. Other	3	1	4
Ringworm (Body)	—	18	18
Scabies	47	57	104
Impetigo	64	378	442
Other Skin Diseases	9	254	263
Minor Eye Defects— (External and other but excluding cases falling in Group II)	8	161	169
Minor Ear Defects	124	96	220
Miscellaneous— (e.g., minor injuries, bruises, sores, chilblains, etc.) ...	100	572	672
Total ...	358	1540	1898

ELEMENTARY SCHOOLS.

TABLE IV.—continued.

GROUP II.

DEFECTIVE VISION AND SQUINT.

(Excluding Minor Eye Defects treated as Minor Ailments—Group 1).

Defect or Disease	No. of Defects dealt with		
	Under the Authority's Scheme	Otherwise	Total
Errors of Refraction (including squint)	496	7	503
Other Defects or Disease of the eyes (excluding those recorded in Group I)	21	3	24
Total ...	517	10	527

Total number of children for whom spectacles were prescribed :—

(a) Under the Authority's Scheme	409
(b) Otherwise	4
Total	413

Total number of children who obtained or received spectacles :—

(a) Under the Authority's Scheme	*369
(b) Otherwise	2
Total	371

*Excluding change of lens or repairs to frames, etc.

TABLE IV.—*continued.*

GROUP III.

TREATMENT OF DEFECTS OF NOSE AND THROAT.

Number of Defects											
Received Operative Treatment											
Under the Authority's Scheme, in Clinic or Hospital				By Private Practitioner or Hospital apart from the Authority's Scheme				Total			
(I)	(II)	(III)	(IV)	(I)	(II)	(III)	(IV)	(I)	(II)	(III)	(IV)
1	7	269	—	—	—	1	6	1	7	270	6
									18	307	

(I). Tonsils only. (II). Adenoids only. (III). Tonsils and Adenoids.

(IV). Other defects of the Nose and Throat.

ELEMENTARY SCHOOLS.

TABLE IV.—*continued.*

GROUP IV.

ORTHOPÆDIC AND POSTURAL DEFECTS.

	Under the Authority's Scheme			Otherwise			Total number treated
	Residential treatment with education	Residential treatment without education	Non- residential treatment at an orthopaedic Clinic	Residential treatment with education	Residential treatment without education	Non- residential treatment at an orthopaedic Clinic	
Number of children treated	1	6	73	—	—	5	79

NOTE. The total should not of necessity equal the sum of various items.

ELEMENTARY SCHOOLS.

TABLE V.

DENTAL DEFECTS.

(1) Number of children who were—

(a) Inspected by the Dentist :—

	Aged	Routine age Groups
Routine age Groups	5	467
	6	705
	7	774
	8	775
	9	756
	10	749
	11	637
	12	867
	13	827
	14	441
	Total	6998

(b)* Specials treated 1432

(c) Total (Routine and Specials) ... 8430

(2) Number found to require treatment 5,892

(3) Number actually treated 4,471

* Included in number treated.

(4) Attendances made by children for treatment 5,857

(5) Half-days devoted to—

Inspection 80

Treatment 802

(6) Fillings—

Permanent Teeth 1,557

Temporary Teeth 454

(7) Extractions—

Permanent Teeth 1,446

Temporary Teeth 5,455

(8) Administration of general anæsthetics for extractions ... 709

(9) Other operations—

Permanent Teeth 171

Temporary Teeth 19

Total 190

ELEMENTARY SCHOOLS.

TABLE VI.

UNCLEANLINESS AND VERMINOUS CONDITIONS.

(1)	Averaged number of visits per school made during the year by the School Nurses	...	...	...	...	...	10
(2)	Total number of examinations of children in the Schools by the School Nurses	...	...	...	...	...	38,228
(3)	Number of individual children found unclean	...	...	...	...	...	817
(4)	Number of children cleansed under arrangements made by the Local Education Authority	...	...	...	...	...	—
(5)	Number of cases in which legal proceedings were taken :—						
	(a) Under the Education Act, 1921	...	...	...	...	...	—
	(b) Under School Attendance Byelaws	...	...	...	...	...	6

MENTAL DEFICIENCY (NOTIFICATION OF CHILDREN)
REGULATIONS, 1928.

Statement of the number of children notified during the year ended 31st December, 1938, by the Local Education Authority to the Local Mental Deficiency Authority.

Total number of children notified ... 13

ANALYSIS OF ABOVE TOTAL.

Diagnosis	Boys	Girls
1. (1) Children incapable of receiving benefit from instruction in a Special School :—		
(a) Idiots	—	—
(b) Imbeciles	1	3
(c) Others	—	—
(2) Children unable to be instructed in a Special School without detriment to the interests of other children :—		
(a) Moral defectives	—	—
(b) Others	—	—
2. Feeble-minded children notified on leaving Special School on or before attaining the age of 16	5	4
3. Feeble-minded children notified under Article 3, <i>i.e.</i> , "special circumstances" cases	—	—
4. Children who in addition to being mentally defective were blind or deaf	—	—
Grand Total	6	7

Secondary Schools.

RETURN OF MEDICAL INSPECTION.

1st January, 1938 to 31st December, 1938.

TABLE I.

A.—Routine Medical Inspections.

					Boys	Girls	Total
Entrants	...	...	...	...	187	264	451
Intermediates		.	...	...	128	228	356
Leavers	...	...	.	...	156	284	440
Total					471	776	1,247

B.—Other Inspections.

Special Inspections	...	...	...	...	...	...	323
Re-inspections	...	...	...	...	...	...	1,258
Total							1,581

C.—Children Found to Require Treatment.

Number of individual children found at Routine Medical Inspection to require Treatment (excluding Defects of Nutrition, Uncleanliness and Dental Disease).

					For defective vision (excluding squint)	For all other conditions recorded in Table IIa.	Total
Entrants	...	...	...	...	43	77	110
Second Age Group		...	...	...	24	49	72
Third Age Group	...	...	...	...	19	47	64
Total					86	173	246

SECONDARY SCHOOLS.

TABLE II.

A RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION
IN THE YEAR.

						Routine Inspections No. of Defects		Special Inspections No. of Defects	
						Requiring treatment	Requiring to be kept under observation, but not requiring treatment	Requiring treatment	Requiring to be kept under observation, but not requiring treatment
Skin	...	(1) Ringworm—Scalp	...	...	...	—	—	—	—
		(2) Ringworm—Body	...	...	...	—	—	—	—
		(3) Scabies	...	...	...	2	—	1	—
		(4) Impetigo	...	...	...	—	—	3	—
		(5) Other Diseases (Non-Tuberculous)				7	2	2	—
		Total (Heads 1 to 5)			...	9	2	6	—
Eye	...	(6) Blepharitis	...	...	...	9	1	1	—
		(7) Conjunctivitis	...	...	...	6	—	9	—
		(8) Keratitis	...	...	...	—	—	—	—
		(9) Corneal Opacities	...	...	...	—	—	—	—
		(10) Other Conditions (excluding Defective Vision and Squint)				—	—	—	—
		Total (Heads 6 to 10)			...	15	1	10	—
Ear	...	(11) Defective Vision (excluding squint)				86	120	158	2
		(12) Squint	...	...	...	1	3	2	—
		(13) Defective Hearing	...	...	...	2	1	—	—
		(14) Otitis Media	...	...	...	3	1	3	—
		(15) Other Ear Diseases	...	...	...	—	—	—	—
Nose and Throat		(16) Chronic Tonsillitis only	...	...	...	4	17	1	—
		(17) Adenoids only	...	...	...	—	2	—	—
		(18) Chronic Tonsillitis and Adenoids				7	—	1	—
		(19) Other Conditions	...	...	...	10	1	5	—
		(20) Enlarged Cervical Glands (Non-Tuberculous)			...	—	2	—	—
		(21) Defective Speech	...	...	...	8	2	—	—
Heart and Circulation		Heart Disease :—							
		(22) Organic	...	...	...	—	4	—	—
		(23) Functional	...	...	...	—	8	—	—
		(24) Anaemia	...	...	...	8	—	1	—

SECONDARY SCHOOLS.

TABLE II.—*continued.*

					Routine Inspections No. of Defects		Special Inspections No. of Defects	
					Requiring treatment	Requiring to be kept under observation, but not requiring treatment	Requiring treatment	Requiring to be kept under observation, but not requiring treatment
Lungs	...	(25) Bronchitis	...	...	—	1	—	—
		(26) Other Non-Tuberculous Diseases	...	...	—	8	—	—
Tuberculosis		Pulmonary :—						
		(27) Definite	...	...	—	—	—	—
		(28) Suspected	...	...	—	—	—	—
		Non-pulmonary :—						
		(29) Glands	...	...	—	1	—	—
		(30) Bones and Joints	...	...	—	—	—	—
		(31) Skin	...	...	—	—	—	—
		(32) Other Forms	...	...	—	—	—	—
		Total (Heads 29 to 32)	...	...	—	1	—	—
Nervous System		(33) Epilepsy	...	...	—	—	—	—
		(34) Chorea	...	...	—	—	—	—
		(35) Other Conditions	...	...	1	1	—	—
Deformities		(36) Rickets	...	...	—	—	—	—
		(37) Spinal Curvature	...	...	55	16	2	—
		(38) Other Forms	...	...	46	12	—	1
(39) Other Defects and Diseases			...	...	15	16	30	3
Total					265	219	219	6

B. CLASSIFICATION OF THE NUTRITION OF CHILDREN
INSPECTED DURING THE YEAR IN THE ROUTINE AGE
GROUPS.

Age Groups	No. of Children Inspected	A (Excellent)		B (Normal)		C (Slightly Subnormal)		D (Bad)	
		No.	%	No.	%	No.	%	No.	%
Entrants ...	451	162	35.9	280	62.1	9	2.0	—	—
Intermediates ...	356	156	43.8	197	55.4	3	0.8	—	—
Leavers ...	440	161	36.6	278	63.2	1	0.2	—	—
Total ...	1247	479	38.4	755	60.6	13	1.0	—	—

SECONDARY SCHOOLS.

TABLE IV.

RETURN OF DEFECTS TREATED DURING THE YEAR.
TREATMENT TABLE.

GROUP I.

MINOR AILMENTS.

Disease or Defect	Number of Defects treated, or under treatment during the year		
	Under the Authority's Scheme	Otherwise	Total
Skin—			
Ringworm :—			
Scalp 	—	—	—
Body 	—	—	—
Scabies	—	3	3
Impetigo 	2	1	3
Other Skin Diseases 	—	3	3
Minor Eye Defects— (External and other but excluding cases falling in Group II) 	—	6	6
Minor Ear Defects 	—	5	5
Miscellaneous— (e.g., minor injuries, bruises, sores, chilblains, etc.) ...	—	13	13
Total ...	2	31	33

SECONDARY SCHOOLS.

TABLE IV.—*continued.*

GROUP II.

DEFECTIVE VISION AND SQUINT

(excluding Minor Eye Defects treated as Minor Ailments—Group I.).

Defect or Disease	No. of Defects dealt with		
	Under the Authority's Scheme	Otherwise	Total
Errors of Refraction (including squint)	199	2	201
Other Defects or Disease of the eyes (excluding those recorded in Group I) ...	4	8	12
Total ...	203	10	213

Total number of children for whom spectacles were prescribed :—

(a) Under the Authority's Scheme	...	...	...	179
(b) Otherwise	...	...	...	21
			Total	200

Total number of children who obtained or received spectacles :—

(a) Under the Authority's Scheme	...	...	...	172
(b) Otherwise	...	...	...	21
			Total	193

SECONDARY SCHOOLS.

TABLE IV.—*continued.*

GROUP III.

TREATMENT OF DEFECTS OF NOSE AND THROAT.

Number of Defects									
Received Operative Treatment									
Under the Authority's Scheme in Clinic or Hospital				By Private Practitioner or Hospital apart from the Authority's Scheme				Total	
(I)	(II)	(III)	(IV)	(I)	(II)	(III)	(IV)	(I)	(II)
1	—	2	—	—	—	—	—	1	—
								2	(IV)
								—	—
								3	

(1). Tonsils only. (II). Adenoids only. (III). Tonsils and Adenoids.
(IV.) Other defects of the Nose and Throat.

SECONDARY SCHOOLS.

TABLE IV.—*continued.*

GROUP IV.

ORTHOPÆDIC AND POSTURAL DEFECTS.

	Under the Authority's Scheme			Otherwise			Total number treated
	Residential treatment with education	Residential treatment without education	Non- residential treatment at an orthopaedic Clinic	Residential treatment with education	Residential treatment without education	Non- residential treatment at an orthopaedic Clinic	
Number of children treated	—	1	1	—	—	2	3

NOTE.—The total should not of necessity equal the sum of various items
as one child is recorded in both the second and third columns.

SECONDARY SCHOOLS.

 TABLE V.

DENTAL DEFECTS.

(1) Number of pupils who were :—

(a) Inspected by the Dentist	...	...	...	...	46
(b) Actually treated	...	...	...	...	46

(2) Fillings—

Permanent Teeth	...	...	...	...	61
Temporary Teeth	...	...	...	...	—

(3) Extractions—

Permanent Teeth	...	...	...	...	29
Temporary Teeth	...	...	...	...	14

(4) Administration of general anæsthetics for extractions ... 4

(5) Other Operations—

Permanent Teeth	...	...	...	...	8
Temporary Teeth	...	...	...	...	—

(6) Number of attendances made by children ... 83

CONTENTS.

REPORT OF MEDICAL OFFICER.

Members of Committees	...	...	...	...	...	3
Public Health Staff	...	...	...	...	...	5

PART I.

SECTION A.

I. Statistical Summary	...	...	...	...	...	10
II. Vital Statistics	...	...	...	...	...	11

SECTION B.—I.

I. Public Health Staff	...	...	...	...	...	13
II. Laboratory Facilities	...	...	...	...	...	13
III. Ambulance Facilities	...	...	...	...	...	13
IV. Nursing in the Home	...	...	...	...	...	14
V. Clinics and Treatment Centres:—						
1. Infant Clinics	...	...	...	...	...	14
2. Ante-natal Clinics	...	...	...	...	...	15
3. Venereal Diseases Treatment Centre	...					15

VI. Hospitals:—

Southend General Hospital	...	...	...	...	17
Southend Municipal Hospital	...	...	...	...	17
Borough Sanatorium	...	...	...	...	17

SECTION B.—II.

Poor Law Medical Relief	...	...	...	...	...	18
Vaccination	...	...	...	...	...	18

SECTION B.—III.

1. Midwifery Service.

(a) Midwives Acts, 1902-1926	...	...	...	...	19
(b) Inspection of Midwives	...	...	...	...	19
(c) Medical Aid for Midwives	...	...	...	...	19

(d) Midwives Act, 1936:—

1. Surrender of Certificates	...	20
2. Municipal Midwives	... ..	21
2. Unmarried Mothers	... ..	22
3. Maternal Mortality	... ..	23
4. Work of Health Visitors	... ..	23
5. Infant Life Protection	... ..	24
6. Boarded-out Children	... ..	25

SECTION B.—IV.

Registration of Nursing Homes		25
-------------------------------	--------	----

SECTION C.

General Sanitation.

Water Supply	... ..	26
Sewerage	... ..	28
Public Mortuary	... ..	29
House Boats	... ..	29
Refuse Removal	... ..	29
Refuse Disposal	... ..	30
Sanitary Inspection	... ..	30
Disinfection of Houses	... ..	32
Drain Testing	... ..	32
Common Lodging Houses	... ..	32
Offensive Trades	... ..	32
Rag Flock Acts, 1911 and 1928	... ..	32
Factory and Workshops Act, 1921	... ..	32
Shops Acts	... ..	33
Offices	... ..	34
Camping Sites	... ..	34
Eradication of Bed Bugs	... ..	35
Schools	... ..	35
Swimming Baths	... ..	35

SECTION D.

Housing	...	...	...	...	...	...	...	36
Overcrowding	...	...	...	...	...	...	...	37
Unfit Houses		...	...	...	...	...	...	38
Housing Statistics		...	...	...	...	...	...	40

SECTION E.

Inspection and Supervision of Food.

A. The Milk Supply—

Milk and Dairies Order, 1926	...	...	41
The Milk (Special Designations) Order, 1936	...	...	41

B. Meat—

Slaughterhouses	...	...	...	...	42
Slaughter of Animals Act, 1933	...			...	42
Public Health (Meat) Regulations				...	42

C. Unsound Food 43

D. Food and Drugs (Adulteration) Act ...	...	43
--	-----	----

E. Chemical and Bacteriological Examinations ... 45

F. Nutrition	...	...	...	...	...	45
--------------	-----	-----	-----	-----	-----	----

G. Shellfish (Molluscan)	...	...	...	...	45
--------------------------	-----	-----	-----	-----	----

SECTION F.

I. Infectious Diseases.

Notifiable Diseases	...	...	...	...	46
Scarlet Fever	...	...	...	...	46
Puerperal Pyrexia	...	...	...	...	48
Ophthalmia Neonatorum		...	...	...	49

II. Cancer	...	...	...	...	...	...	50
------------	-----	-----	-----	-----	-----	-----	----

III. Tuberculosis	...	...	...	...	...	52
-------------------	-----	-----	-----	-----	-----	----

SECTION G.

Contagious Diseases (Animals) Acts	...	...	...	59
------------------------------------	-----	-----	-----	----

SECTION H.

Mental Deficiency Act	...	...	...	...	...	60
-----------------------	-----	-----	-----	-----	-----	----

SECTION I.

Blind Persons Act, 1920	...	...	...	...	...	61
-------------------------	-----	-----	-----	-----	-----	----

SECTION J.

Miscellaneous Appendices—

Births Registered	...	...	...	...	...	66
Notification of Births Act, 1921			...	...	...	66
Milk for Mothers and Children			...	...	...	66
Meals for Expectant Mothers			...	...	...	67
Dental Treatment	...	...	...	...	...	67
Tonsils and Adenoids		...	...	...	...	67
Treatment of Squint		...	...	...	...	67
Orthopædic Treatment		...	...	...	...	68
Deaths in Institutions		...	...	...	...	68
Inquests	...	...	...	...	...	68
Deaths Certified by Coroner	...		...	...	...	69
Uncertified Deaths	...	...	...	...	...	69
Ministry of Health Tables	...		...	...	...	70
Meteorological Tables		...	...	...	...	74

REPORT OF MEDICAL SUPERINTENDENT OF THE
SOUTHEND MUNICIPAL HOSPITAL.

SECTION I.

Staff	...	...	...	...	...	...	...	80
Nurses' Training School				...	...	...	...	84
Sickness in Nursing Staff				...	...	...	...	87

SECTION II.

Accommodation	...	...	...	...	...	...	87
---------------	-----	-----	-----	-----	-----	-----	----

SECTION III.

Structural Developments	...	...	...	...	...	90
Hospital Library	...	...	...	...	...	91

SECTION IV.

General Work of the Hospital	...	...	...	...	91
Statistical Tables and Analyses	...	...	...	...	93
Averages for the Year	...	...	...	...	94

SECTION V.

Special Departments	...	...	...	...	...	97
(a) Fractures	...	...	...	...	...	98
(b) Operative Surgery		...	...	...	...	98
(c) Analysis of Methods of Anæsthesia				...	...	100
(d) Radiological Department			...	...	...	101
(e) Physio-Therapy Department			...	...	...	102
(f) Maternity Department	...	...	...	...	...	103

SECTION VI.

Examination of Pathological Specimens ...	...	...	110
---	-----	-----	-----

SECTION VII.

Dispensary	...	...	...	...	...	...	...	110
------------	-----	-----	-----	-----	-----	-----	-----	-----

SECTION VIII.

Conclusion	...	...	...	...	...	...	112
------------	-----	-----	-----	-----	-----	-----	-----

APPENDIX—Statistical Tables	...	...	...	...	113
-----------------------------	-----	-----	-----	-----	-----

REPORT OF MEDICAL SUPERINTENDENT OF THE
BOROUGH SANATORIUM.

Staff	...	...	...	...	...	...	...	...	134
Examination Results			...	...	...	...	...	...	134
Accommodation	...		...	...	...	...	...	...	135
Air Raid Precautions			...	...	...	...	...	...	135
Clinical Statistics			...	...	...	...	...	...	136
Fatal Cases		...	...	...	...	...	...	...	137
Scarlet Fever		...	...	...	...	...	...	...	137
Diphtheria		...	...	...	...	...	...	...	140

Diseases of Central Nervous System	...	...	...	...	143
Enteric Group of Infections	...	...	...	...	147
Measles	...	...	...	...	149
Whooping Cough	...	...	...	...	150
Erysipelas	...	...	...	...	150
Other Diseases	...	...	...	...	150
Staff Illness	...	...	...	...	151
Immunization of Staff	...	...	...	...	152
Smallpox Hospital	...	...	...	...	152

REPORT OF SCHOOL MEDICAL OFFICER.

SECTION

I. Children's Care Sub-Committee	...	...	...	154
Staff	...	...	...	154
II. Co-ordination	...	...	...	156
III. School Hygiene	..	...	...	156
IV. Medical Inspection	...	...	...	157
V. Findings of Medical Inspections	...	...	...	157
VI. Following Up and Work of Nurses	...	...	...	160
VII. Arrangements for Treatment	...	...	...	161
VIII. Infectious Diseases	...	...	...	167
IX. Open Air Education	...	...	...	167
X. Physical Training	...	...	...	167
XI. Provision of Meals	...	...	...	167
XII. Co-operation of Parents, Teachers, School Attendance Officers, and Voluntary Bodies	...	...	...	168
XIII. Blind, Deaf, Defective and Epileptic Children	...	...	...	168
XIV. Full Time Courses for Higher Education for Blind, Deaf, Defective and Epileptic Students	...	...	...	170
XV. Nursery Schools	...	...	...	170
XVI. Secondary Schools and Other Institutions of Higher Education	...	...	...	170
XVII. Parents' Payments	...	...	...	171

XVIII.	Health Education	...	...	...	...	...	171
XIX.	Special Enquiries	...	...	...	...	...	171
XX.	Junior Instruction Centre	...	...	...	...	...	171
XXI.	Miscellaneous	...	...	...	...	...	173
	Board of Education Tables	...	...	...	...	...	175

